

VOYAGE

Around the World by the
King's Frigate La Boudeuse
& the Supply Ship L'Etoile

In the Years 1766, 1767, 1768 & 1769



Translated from the French 2013
by
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INTRODUCTION BY THE TRANSLATOR

BOUGAINVILLE'S ORIGINAL WORK.

Bougainville's account of his voyage was first published in Paris in 1771. Although it received favourable reviews, it did not by any means "fly off the shelves". The first edition probably comprised no more than 1000 copies. The following year, 1772, a second edition, in two volumes, was published.

The first English edition, in a translation by J. R. Forster, was published in London, also in 1772, by J Nourse in Covent Garden. New versions of the book have appeared at regular intervals; it remained in print well into the twentieth century.

I first came to read the first French edition of Bougainville's journal because of my interest in early maritime exploration. Occasionally I doubted my interpretation of some of the 18th century French technical maritime terms so, I looked for an English translation. I found the one that had been made in 1772 by one John Reinhold Forster, F. A. S.

A PDF (scanned pages) of Forster's translation is available from:

http://www.archive.org/details/cihm_32942

There are also digital versions available in various formats but, I found they had not come through the OCR (optical character recognition) process very well. Many pages in these documents are almost unreadable. I have made a MS Word version which is available in PDF format from:

<http://www.archive.org/details/VoyageAroundTheWorldByLewisDeBougainville1766-9>

I am aware there are some typographical errors; I'll get around to making the necessary corrections one of these days!

Forster had been for some time in the employ of the British Admiralty, he accompanied James Cook, as a natural history scientist, during that explorer's second voyage.

When I read Forster's translation several things struck me:

- a) Reinhold Forster's translation frequently does not, in my opinion, express what I believe Bougainville intended his readers to understand.
- b) Many of Reinhold Forster's footnotes are, again in my opinion, unjustly hostile. John Reinhold worked, I suppose, at a time when the *entente* was not quite as *cordiale* as it might have been! However, such antipathy was not the norm; generally relations between French and English scientists and intellectuals were extraordinarily good. There were frequent occasions when information was exchanged; there were even visits made at times when an actual state of war existed.
- c) Some original material, which should have left in - Forster omitted. (Notably: the chapter on the natural history of the Falkland Islands and some of Bougainville's observations regarding attitudes toward sexuality and morality in Tahiti) Worse, he added some stuff that should have been left out.

It appeared to me that Forster was a man with a chip on both shoulders. I'm not alone; the historian JC Beaglehole wrote of Forster:

"But who is going to envy John Reinhold Forster? We have come to one of the awkward beings of the age, the patently conspicuous phenomenon of the voyage...[referring to Cook's 2nd. Voyage] There is nothing that can make him other than one of the Admiralty's vast mistakes. From first to last on the voyage, and afterwards, he was an incubus. One hesitates, in fact, to lay out his characteristics, lest the portrait should seem simply caricature. Dogmatic, humourless, suspicious, pretentious, contentious, censorious, demanding, rheumatic, he was a problem from any angle."

MY TRANSLATION.

I decided, by way of making a new translation, to give Bougainville a fresh hearing with the object of setting to rights the paucity of "fair dealing", Forster exhibits in his.

My book is based on a French edition published in Paris by Saillant & Nyon 1771.

The Saillant & Nyon 1771 version is available for download from:

http://www.archive.org/details/cihm_39070

I have attempted, in undertaking this translation, to convey, as accurately as possible the story that Bougainville intended to tell. Where this has called for language departing from a word for word rendition, I have unhesitatingly grasped that nettle. Where I have misinterpreted, the fault is mine alone.

The maps, given in the Saillant & Nyon 1771 version, have been included. Those in the PDF document I worked with had not scanned particularly well. I have tidied them up and made them as presentable as possible; they will tolerate a reasonable degree of enlargement. The map of the world, which was originally a fold-out, I have divided into two overlapping sections for greater clarity. Where the meaning of the French text is obvious I have not rendered it into English.

Any important information on the maps that was not clear has been re-typed; the English form of contemporary place names has been given where appropriate.

I have prepared a Google Earth map, showing the route the ships followed (as accurately as is possible) against up to date mapping. This document has the name "Bougainville-Voyage around the world.kmz". It can be downloaded at www.archive.org

Bougainville's journal included only a single appendix; a vocabulary of the Tahitian language. I have retained it as Appendix 1 and taken the liberty of adding several other appendices that I hope will interest the modern reader.

Though I have called this part of the document "An Introduction by the Translator", it was for want of a better word, for by profession I am not a translator. I am, however, or at least I was, a seaman; something Forster was not.

Bougainville in his opening remarks says of his book:

"...it is directed rather towards those whose business is of a maritime nature".

He then asks his readers' forbearance, modestly drawing attention to his own limited experience and competence as an author; explaining:

"...my style is that of a man roughly tutored on the high seas and in the lonely places of the world"

May I, concerning both these points, let his words speak on my behalf also?

Bougainville comes across over the two-hundred odd years separating us with an incredible immediacy and freshness. Here is a French aristocrat; just a few years before a social upheaval that would nigh-on annihilate his class. He is a warm and compassionate human being who really understands and cares about the miserable and dangerous existence that the men who worked his ships had to endure; this is at a time when such sensitivities were not the characteristics one closely associated with sea officers.

Bougainville is a Commodore charged with a difficult mission in a hostile, little understood and stormy world; in an environment where hazards of every kind awaited the unwary: very limited resources, seldom a helping hand to call upon; only a steadfast reliance on his own competence and judgement to gets his ships and men from one place of relative security to the next.

I have occasionally added some footnotes where I consider the 18 century text would benefit from a little explanation.

The text contains a great number of nautical technical terms. I toyed with giving an explanation for each of them. I have not done so as it would have made the book rather too long. In any case, for those who just have to know what a Trestle-Tree or a Jeer-Block is - such information is nowadays easily unearthed on the web.

NOTES

1. The original document gives water depths in "*Brasses*", approximately 1.525 metres. I have translated a "*brasse*" as "a fathom", approximately 1.828 metres. Thus where soundings are mentioned, the water depth is actually somewhat shallower than stated.
2. To make clear who is the originator of a particular footnote; those by Bougainville himself are followed by.- de B and mine by .- JFF
3. I will be grateful for any observations you may wish to make about this work, in particular to those errors that I'm sure still lurk within, but, more particularly, anything in my translation that does not faithfully reflect what Bougainville intended to express.

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VOYAGE

AROUND THE WORLD

BY THE KING'S FRIGATE

LA BOUDEUSE AND THE SUPPLY SHIP L'ÉTOILE

In the years 1766, 1767, 1768 & 1769



AT PARIS

Saillant & Nyon, Booksellers, Rue S. Jean-de-Beauvais.

Of the BRETTON Press, Principal printers to the KING

M. DCC. LXXI.

WITH THE KING'S AUTHORITY AND PERMISSION.

TO THE KING

SIRE,

The voyage that I am about to recount is the first of this type of enterprise undertaken by the French nation and carried out by ships of YOUR MAJESTY. The whole world knows already the shape of the earth. Those of your subjects, to whom this important discovery was entrusted, chosen from amongst the most knowledgeable of French scientists, have determined the dimensions of the globe.

America, it is true, was discovered and conquered; the development of route by sea to the Indies and the Moluccas are marvels of courage and success that, without a doubt, belong to the Spanish and Portuguese nations. The intrepid Magellan, under the auspices of a king aware of a man's qualities and considered by him to be more than just a visionary, was not limited by the obstacles so many of his contemporaries suffered. He opened the barrier, overcame great difficulties and, despite being deprived of the pleasure of returning to Seville in his ship; from which port he had sailed, nothing can deprive him of the glory of having been the first man to sail around the world. His example encouraged English and Dutch navigators to find new lands; lands which have served to enrich Europe as they became developed

But the sort of primacy and pecking-order which has been applied to discoveries has not prevented French navigators from claiming, with justice, a share in the glory attached to these brilliant but difficult enterprises. Several regions of America have been discovered by those courageous subjects of the kings, your ancestors. Gonneville, born at Dieppe, made the first landing on the Southern parts. Different causes, some within and some beyond France, have since then arisen which have caused the appetite for exploration to be suspended.

YOUR MAJESTY,

SIRE,

Your humble and obedient servant and subject.

DE BOUGAINVILLE

OPENING REMARKS

I think that it is appropriate to present at the beginning of this narrative a list of all the voyages that have been made around the world and the various discoveries that have been made in the Southern sea, now called the Pacific Ocean, up to the present day.

First voyage around the world.

It was in 1519 that Ferdinand Magellan, a Portuguese, commanding five Spanish ships that sailed from Seville. He discovered the Straits that bear his name and by which route he entered into the Pacific Ocean. Here he discovered several small deserted islands south of the equator; later on he found the Larrone Islands¹ and, lastly, the Philippines. His ship, the Victory, returned to Spain alone via the Cape of Good Hope. The Victory was set up ashore in Seville as a monument to this expedition which was perhaps the most testing men had undertaken up to that date. In this manner Magellan demonstrated that the earth is a sphere and determined the circumferential distance of the globe.

Second voyage.

Drake, an Englishman, left Plymouth with five ships on the 15th. September 1577. He returned with just one ship on the 3rd. of November 1580. He had made the second circumnavigation of the globe. The queen Elizabeth dined aboard his ship the Pelican; later to be carefully preserved in a basin with an honorary inscription on its mainmast. Exact records of Drake's discoveries have not survived. On his charts there is marked a coastline to the South of the polar circle in the Southern Sea, some islands to the North of the equator and others to the north of New Britain.

Third Voyage.

The Knight Thomas Cavendish, an Englishman, left Plymouth on the 21st July 1586 with three ships. He returned with two ships on the 9th September 1588. This voyage, the third circumnavigation of the world, did not result in any new discoveries.

Fourth Voyage.

Olivier de Noort, a Dutchman, left Rotterdam the 2nd July 1598 with four ships. His route went through the Straits of Magellan. Sailing in sight of the Western coast of South America, he travelled to the Larrones, the Philippines, the Moluccas and to the Cape of Good Hope.

He returned to Rotterdam with only one ship on the 26th August 1601. He made no discoveries in the Southern Sea.

¹ Now the Mariana Islands.-JFF

Fifth Voyage.

George Spilberg, a German in the service of Holland, sailed from Zeeland on the 8th August 1614, with six ships. He had lost two ships even before getting to the Larrones, he reached the Straits of Magellan. Passing through those straits and traded along the coasts of Peru and Mexico. Later, having discovered nothing during the journey, he continued on to the Larrones and the Moluccas. Two of his ships returned to Dutch ports on the 1st July 1617.

Sixth Voyage.

Almost at the same time, Jaques Lemaire and [Willem Cornelisz] Schouten immortalised their names. They left the Texel on the 14th June 1615 in the ships Concord and The Hoorn. They discovered the strait which bears the name of Lemaire. They were the first to enter the Southern Sea by way of Cape Horn. There they discovered in 15° 15' south latitude and about 142° longitude west of Paris, the Isle of Dogs and, by 15° south latitude and 100 leagues further west, Bottomless Island. At 14° 46' south latitude and 15 leagues further west, Fly Island, at 16° 10' south latitude and between 163° and 165° longitude west of Paris, they found two islands: Cocos Island and Traitors Island; 50 leagues further westward, Hope Island and Horn Island in 15° 56' south latitude and at about 79° longitude west of Paris. Hugging the coast of New Guinea they passed its Southern extremity at Gilolo they arrived in Batavia in 1616.

George Spilberg made a stop there and they were sent back to Europe in ships belonging to the [Dutch East India] Company. Lemaire died of an illness at Maurice Island² but Schouten saw his homeland again. The Concord and the Hoorn returned after two years and ten days.

Seventh Voyage.

Jaques the Hermit, a Dutchman and Jean Hugues Schapenham, in command of a fleet of eleven ships, set out in 1623 intending to conquer Peru. They entered the Southern Sea by way of Cape Horn; they skirmished along the coasts occupied by the Spanish from where they arrived at the Larrones. They did not make any discoveries in the Southern Sea and went on to Batavia. While they were leaving the strait called *La Sunda*, Jaques the Hermit died, his ship, all that was left of the fleet regained the Texel on the 9th July 1626.

Eighth Voyage.

In 1683, Cowley, an Englishman, sailed from Virginia, rounded Cape Horn. He made several excursions into the Spanish held regions of the coast. He then went to the Larrones from where he returned to England via the Cape of Good Hope; he arrived home on 12th October 1686. This navigator did not make any discoveries in the Southern Sea. He claimed to have discovered, in the Northern Sea at 47° South latitude and 80 leagues from the coast of Patagonia, Pepis Island. I looked for it three times and several Englishmen have twice tried but didn't find it either.

² Mauritius. JFF

Ninth Voyage.

Woods Roger, an Englishman, left Bristol on the 2nd August 1707; after rounding Cape Horn he battled with the Spaniards along the coast as far north as California. From here, by a route already well-travelled, he went to the Larrones, to the Moluccas and to Batavia. Then, via the Cape of Good Hope, he arrived in the Downs on the 1st October 1711.

Tenth Voyage.

Ten years later, *Roggewin* [*Jacob Roggeveen*], a Meckleburger in the service of Holland, left the Texel with three ships. He entered the Southern Ocean via Cape Horn in order to try to locate *Terre de Davis*³ but did not find it. He discovered Easter Island south of the Tropic of Capricorn, of which the latitude is uncertain. Then, between the 15th and the 16th parallel south, the Pernicious Islands, where he lost one of his ships, and almost in the same latitude, the islands Aurora, Vespres, the Labyrinth (Consisting of six islands) and Recreation Island, where he stayed for a while. Later, south of the 12th southern parallel, three more island which he named Bauman Islands. Finally, south of the 11th southern parallel, the islands of Thienhoven and Gronigue; then sailing along the coasts of New Guinea and Papua he arrived at Batavia where his ships were confiscated.

Admiral Roggewin [*Jacob Roggeveen*], himself, was transported to Holland in a Company ship; he arrived in the Texel on the 11th July 1723, six hundred and eighty days after leaving that same place.

Eleventh Voyage.

The taste for great voyages of exploration appeared to have died out and then, in 1741, Admiral Anson made a voyage around the world. The details of this journey have been made widely known but have added nothing to our knowledge of geography.

Twelfth Voyage.

Since Anson's voyage, little was achieved during the next 20 years. But, recently new life has been breathed into the spirit of adventure.

Thirteenth Voyage.

Commodore Byron sailed from the Downs on the 20th June 1764; he passed through the Straits of Magellan and discovered some islands in the Southern Sea. Taking an almost north-westerly route, he arrived at Batavia on the 28th November 1765, at the Cape of Good Hope on 24th February 1766 and on the 9th May he arrived back in the Downs, six hundred and eighty days after his departure.

Two months after the return of Commodore Byron Captain Wallis left England with the vessels Dolphin and Swallow. He passed through the Straits of Magellan and became separated from the

³ Terre de Davis was believed to have been located in the same area as Easter Island.- JFF

Swallow, commanded by Captain Carteret, passed out of the strait, in August 1767, or thereabouts; he discovered an island near to the 18th parallel. He sailed north towards the equator and into the region of Papua; he arrived at Batavia in January 1768. After pausing at the Cape of Good Hope he finally got back to England in the month of May of that same year.

His companion, Carteret, after suffering great hardships in the Southern Sea, arrived at Macassar in the month of March 1768, having lost most of his crew. He was in Batavia by the 15th December and at the Cape of Good Hope by the end of December. You will see [from my ship's log] that I met him at sea on the 18th February 1769 in approximately 11° North latitude. He did not arrive back in England until June.

You will have noted that of these thirteen voyages,⁴ none were instigated by France and that only six of them were undertaken having exploration as their principle objective. Be aware that Magellan, Drake, Lemaire, Roggevin (Jacob Roggeveen) Byron and Wallas [sic] were interested solely in enriching themselves by plundering the possessions of the Spanish. Furthermore, they followed already established routes, consequently adding nothing to our understanding of the world's geography.

In 1714, a Frenchman named *Le Barbinais le Gentil*, set sail in a privately owned ship to trade on the coasts of Chile and Peru. From there he went to China where he stayed trading at various locations for almost a year. He transferred to a different ship and returned to Europe. He had himself, it is true sailed around the world personally, but it cannot be claimed that this was a circumnavigation to the credit of the French nation.

Let us now discuss some of the adventurers who sailed either from Europe, from the Eastern seaboard of South America or from the East Indies and, whilst they made discoveries in the Southern Sea, did not sail around the world.

It appears that a Frenchman, *Paulmier de Gonneville*, made his first voyages in 1503 and 1504. The location of the lands at which he landed, and from where he brought a native back to France, is not known. The government, having failed to repatriate him and Gonneville, considering himself personally responsible for the man's predicament, caused him to be married to his heiress.

Alfonse de Salazar, left a Mexican port in 1526 and between the 9th and 11th parallel north discovered almost in the same longitude as Bartholomew Island⁵, a group of islands which he named King's Islands. He then went to the Philippines and the Moluccas. While on his way back to Mexico he became the first person to gain a detailed acquaintance with the coast of New Guinea and Papua. He also found, at 12° north latitude and at about 80 leagues to the east of King's Island, a chain of low-lying islands, which he named the Barbus Islands.

Diego Hurtado and Ferdinand Grijalva left Mexico in 1493 to reconnoitre the Southern Sea. They only discovered one island, situated in 20° longitude west of Paris. They named the island Isle Saint Thomas.

Jean Gaëtan, sailed from Mexico in 1542; he also chose a route north of the equator. He discovered between the 19th and the 20th parallel, but at different longitudes, several islands later to become known as Rocca, Partita, the Coral Islands, Garden Islands, the Sailor and the *Isle d'Arezise*. Finally, he reached New Guinea, or as he called it, New Britain. At this date Dampier had yet to discover the passage which now bears his name.

⁴ Dom Pernetty in his *Dissertation sur L'Amerique*, speaks of a voyage around the world, undertaken in 1719, by Captain Shelwosk but I have no knowledge of this voyage. De B.

⁵ Now Malo in the Vanuatu group. - JFF

The following voyage is more important than those preceding it.

Alvar de Mendocce and Mendina left Peru in 1567. The island they discovered they named the Solomon Islands, on account of the riches to be found there. Even if one accepts what has been said, concerning the wealth of these islands is not a myth, it is still not known where they are situated and all attempts to locate them have proved fruitless. Nothing more precise can be said other than that they lie south of the equator between the 8th and the 12th parallel. Additionally, the positions of neither Isabella Island nor Guadalcanal, which these voyagers also mention, are any more accurately known.

In 1579 Pedro Sarmiento left Callao del Lima with two ships. He first went into the Southern Sea via the Straits of Magellan where he made important observations. During this expedition he showed courage as well as intelligence. A report of this voyage was printed at Madrid in 1578 and in it is given information which is applicable to mariners intending to take passage through the Straits of Magellan.

In 1595 Alvar de Mindana, who had sailed with Mendocce in the year 1567, once again sailed from Peru with 4 ships with the intention of locating the Solomon Islands. He was accompanied by Ferdinand de Quiros who later became famous by virtue of his own discoveries. Between the 9th and the 11th southern parallel and about 108° to the west of Paris, Mindana discovered the islands Saint Pierre, Magdelaine, la Domenique and Christine. He named this group the Marquises de Mendocce, after Donna Isabelle Mendocce, who was a passenger aboard his ship. About 80° further to the west, he discovered the Saint Bernard Islands and almost 200 leagues to the west of them, Solitaire Island. Last of all he found Saint Croix Island at about 140° longitude east of Paris. From there his fleet sailed to the Larrones and then to the Philippines. General Mindana himself never got there, what became of his ship remains unknown.

Ferdinand de Quiros, companion to the unfortunate Mindana, after having taken Donna Isabella back to Peru, sailed on the 21st December 1605. He generally followed a West S Westerly course. First, he discovered a small island near to 25° south latitude, and 7 or 8 other small, low-lying islands, barely visible above sea level. These islands he named after himself. Then, at 13° south latitude and at about 157° to the west of Paris, the island he named *Belle Nation*. He then tried to relocate *Isle Saint Croix*, which he had seen on his first voyage, but, he was not successful. At 13° South latitude and at about 176° of longitude east of Paris he discovered the island of Tumaco and about 100 leagues further westward in 15° south latitude, a large country which he named Terre Australe du Saint-Esprit. This land various geographers have since indicated at various locations. He then sailed westwards, still searching fruitlessly for Saint Croix Island. He returned home at the end of 1606.

Abel Tasman left Batavia the 14th August 1642, he found, at 42° south latitude and at about 55° to the east of Paris, a land he called *Vandiemien*. Leaving there he sailed west and at about 160° east longitude he discovered New Zealand at 42° 10' south latitude. He followed the coast until he reached the 34° south latitude and then headed North-East and at 25° 35' south latitude and 75° east of Paris *l'isle Pylsaart, Amsterdam and Rotterdam*⁶. He refrained from further exploration and came back to Batavia by passing between New Guinea and Gilolo.

New Holland is the collective name given to the lands and islands extending from 6° to 34° south latitude and from 105° to 140° longitude west of the Paris meridian. It is appropriate that it is so named since it was almost exclusively Dutch navigators who explored and mapped the different

⁶ Now called Annamooka.-JFF

parts of this region. The first land to be discovered amongst this expanse of ocean was that called *Concorde* or *Endracht*, after the name of the ship of the discoverer who first saw it in 1616 in the latitude of the 21st and the 25th southern parallel. In 1618, another part of this land situated near the 15th parallel, was discovered by *Zeachen*. He gave it the name of *Arnhem* and *Dieman*. It is not the same country as that which had been named *Dieman* by Tasman. In 1619, *Jean d'Edels* gave his name to a southerly part of New Holland. Another part, situated between the 30th and the 33rd parallel received *Lieuwin's* name.

Pierre de Nultz, in 1627, applied his name to that land which lay to the West of *Lieuwin's*. *Guillaume de Witt* named after himself a part of the western coast adjacent to the tropic of Capricorn, even though it should in justice have borne the name of Captain *Viane*, a Dutchman, who in 1628 had paid for the honour of this discovery by the loss of his ship and all the riches she carried.

In that same year, 1628, between the 10th and the 20th parallel the great Gulf of Carpentaria was discovered by *Pierre Carpenter*, a Dutchman. It was only a short time after its discovery that all parts of this coastline had been reconnoitred by the Dutch.

Dampier, an Englishman, after having set out from Great Timor, first voyaged along the coast of New Holland and made a landing between the lands of *Arnhem* and *Dieman*. This short exploration made no new discoveries.

In 1699 *Dampier* sailed from England with the express intention of exploring all the region of New Holland; at that time it was in the possession of the Dutch and concerning which the Dutch had refrained from publishing any details. He travelled the length and breadth of the region between the 28th and the 15th parallel. He observed those lands called *Concorde* and *Witt* and considered that there might be a passage to the South of Carpentaria. He returned to Timor from where he revisited the Papuan Islands and then sailed the length of New Guinea where he discovered the passage which now bears his name.

He named the island on the Eastern side of this passage New Britain and then retraced his course along the New Guinea coast back to Timor. *Dampier* was the same man, who between 1683 and 1691, sometimes as a freebooter, sometimes as a merchant adventurer, had completed a circumnavigation but not in only one ship.

Such is a brief outline of the several voyages around the globe, of the different discoveries made and of the knowledge gained in the vast Pacific Ocean up to that time when we ourselves set out.

Since we returned to France and the first edition of this document was published, English navigators have returned from a new circumnavigation. This voyage, it seems to me, is the most modern of this type of venture because, in their course, new discoveries were made concerning the many and various aspects of the nature of our world. Endeavour was the name of their ship which was commanded by Captain Cook. She carried two illustrious scientists Mr Banks and Mr Solander. A report of the maritime part of this expedition has already been published. It is expected that the reports of Mr Banks and Mr Solander, concerning the natural history aspects, will be available during the coming winter. While we wait for their publication I considered it appropriate to set out here an abridged version of the notes, concerning that famous voyage, which Mr Banks himself sent to the Paris Academy of Sciences.

Sailing from Plymouth on the 25th August 1768, they arrived at Tierra del Fuego on the 16th January 1669 after having made two stops, one at Madeira and the other at Rio de Janeiro. They stayed five days at the Bay of Success then, having rounded Cape Horn, they set course for Tahiti. They stayed at that island from the 13th April until the 13th July. Here, in June, they observed the transit of Venus

across the sun's disc. Upon leaving Tahiti one of the Tahitians who had sailed with them convinced Cook to visit other islands in the vicinity. They visited six islands at which they found the same way of life and the same spoken language as in Tahiti.

From Tahiti they set course to make a landfall at New Zealand in 40° south latitude. They landed on the east coast on the 3rd of October. They determined, following a six month long voyage around New Zealand, that it comprised two separate islands, with no other land of any consequence in the vicinity. Not, as had previously been generally supposed, a part of the Australian continent. They noted there were several dialects akin to the language spoken in Tahiti and which was, more or less, comprehensible to those Tahitians on board the Endeavour.

Their discoveries were not, however, limited to those already mentioned. After leaving the coasts of New Zealand they made a landfall on the 31st of March 1770 at 38° south latitude on the eastern part of New Holland; hugging the coast they then sailed northward. They anchored and made investigations at several places until, on the 10th of June, they struck a rock at 15° latitude in the same waters that, as you will hear later, I also suffered some embarrassment. They remained stranded for 23 hours and then spent two months repairing the ship in a small inlet close to the rock which had so nearly proved fatal to them.

While in this dangerous region they several times came close to further mishap. Eventually they found, at 6° south latitude, the strait between New Holland and New Guinea by which they emerged into the East Indian Sea.

With an insatiable taste for exploration they once again visited the western and the eastern coastlines of New Guinea. They then sailed along the western side of the island of Java and after passing through the Sunda Strait they arrived at Batavia on the 9th of October; they remained there for two months.

They made calls at the Cape of Good Hope and at the island of Saint Helena finally before finally arriving in the Downs on the 30th of July 1771. This voyage significantly enriched humankind's knowledge of geography and all the three of the realms of natural history.

Before I start to relate the story of the expedition which I had been charged to undertake, I must forewarn that this will not be a work to be read as an amusement, it is directed rather towards those whose business is of a maritime nature. Besides, this long navigation does not offer to the readers of the world any of those interesting events experienced by ships making voyages in times of war. Additionally, it cannot be said that my literary talents have saved this account from a certain degree of dryness regarding style!

However, having been made familiar with the sciences from my earliest age and having had the benefit of certain lessons Mr Alembert had seen fit to instil in me, I was imbued with the competence to present, for public consideration, a treatise on geometry.

I am now at my present age and state far removed from the sequestered world of theoretical science and letters. I fear my style has taken on the character of a wanderer, being the result of the unsettled life I have followed these past twelve years. It is not in the forests of Canada nor yet upon the rolling ocean that the art of writing is nurtured. My brother's literary attributes, so greatly loved by his audience, were on his untimely death, lost to me before he could have an improving influence on my own.

Be that as it may, I neither cite nor do I contradict anyone; even less do I claim to establish or refute any hypothesis. I must emphasise that it is not the striking differences I have observed in the various

countries I visited that have prevented me from telling my story in the style that has become widespread today; a style utterly incompatible with honest philosophy.

How then can I then expect that this story of my fantastic journey, no matter how scrupulously honestly I relate it, will be received favourably? I am a traveller and a sailor, which is to say, in the eyes some, a liar and an imbecile; in particular to that class of idle and haughty writers who, sitting in the detachment of their studies philosophise without constraint upon the world and its inhabitants and make all of nature a subject for their imperious imaginations. Those men, who, having seen nothing for themselves do, by some singular and inconceivable process, write and dogmatise about the observations of voyagers whom they do not credit with even the ability to see and think!

I will end this discourse in giving full credit to the courage, to the zeal and to the unconquerable patience of the officers⁷ and crews of my two ships. It has not been necessary to urge them on with special treatment, such as that as was thought necessary to sustain the English crews of Mr Byron's ship. Their constancy has been tested under the most rigorous conditions and their good-will has never, even for a moment, diminished.

So it is that the French nation is capable of surmounting the most trying difficulties. Nothing is beyond France's ability, just so long as she believes herself to be at least the equal of any other nation upon the earth.

⁷ The officers on board the frigate la Boudeuse, were M. de Bougainville, captain of the ship; Duclos Guyot, captain of a fire-ship; chevalier de Bournnand, chevalier d'Oraison, chevalier du Bouchage, under-lieutenants (*enseigne de vaisseau*) chevalier de Suzannet, chevalier de Kué.

Midshipman acting as officers; le Corre, super-cargo (*officier marchand*); Saint-Germain, ships-clerk; la Veze, the chaplain; la Porte, surgeon.

The officers of the store ship l'Etoile, consisted of M. M. Chenard de la Giraudais, captain of a fire-ship; Caro, lieutenant in an Indiaman; Donat, Landais, Fontaine, and Lavary-le-Roi, (*officiers marchands*); Michaud, ships clerk; Vivez, surgeon.

There were also Mr de Commerçon, a physician; Mr Verron, an astronomer, and Mr de Romainville, an engineer.- De B.

[illegible]

LONGITUDE OCCIDENTALE DU MÉRIDEN DE PARIS

[illegible]

LONGITUDE ORIENTALE DU MÉRIDIEN DE PARIS

VOYAGE

AROUND THE WORLD

THE FIRST PART

Comprising the account from leaving France until sailing out of the Magellan Strait.

THE 1st. CHAPTER

1766. November.

Objective of the voyage.

In the month of February 1764 France was engaged in setting up an establishment on the Falkland Islands. Spain had laid claim to these islands a dependent part of the continent of South America and the rights of Spain, having been recognised by the king [of France], I received orders to hand over our establishments to the Spaniards and, having done so, to go to the East Indies by crossing the Southern Sea between the tropics.

For this expedition I was given a frigate, la Boudeuse, carrying twenty-six twelve pounder cannon. I was to be met at the Falklands by the store-ship l'Etoile bringing me foodstuffs and equipment for our planned long navigation; she was to follow us for the duration of our campaign.

Various circumstances arose that caused the rendezvous of la Boudeuse and the store-ship to be delayed. The result of this was that the duration of our voyage became extended by almost eight months.

During the first days of November 1766 I went to Nantes, where la Boudeuse had recently been constructed. Here also M. Duclos-Guyot, Captain of a Fire-ship, and now my second-in-command, was engaged in setting up the ships equipment. I found the ship to be longitudinally out of true by seven inches. This had been the result of her hitting a sand bar when she was launched.

Departure from Nantes.

On the 5th of that month (November) we went down to Paimbeuf at Minden to complete her armament. On the 15th of the month (November) we set sail from that mooring, our destination being the River Plate. There I was to rendezvous with the Spanish frigates Esmiralda and Leibre they having sailed from Ferrol on the 17th of October. The Commodore of these ships had been charged to receive the Falkland Islands on behalf of His Catholic Majesty.

Strong winds.

On the morning of the 17th we experienced violent winds from West S West to North West; they became worse during the night which we passed under bare poles with our lower yards unshipped,

the fore-sail clew, under which canvas we had attempted to maintain our heading, having carried away. On the 18th, in the morning, our fore-topmast broke halfway along its length. The main-mast held out until 8 o'clock when it failed in the cap and carried away with it the head of the main-mast.

Return to Brest.

This last event made the continuation of our course impossible and, so, I decided to return to Brest where we entered on the 21st of November.

The damage occasioned to our masts and rigging caused by this storm has provoked me to make the following observations upon the state and qualities of the frigate under my command:

1. The hull's pronounced tumblehome results in the angle between the masts and the shrouds being too acute to support the masts effectively.
2. The consequence of above defect was made worse by the way the ship had been ballasted. Because of the great quantity of provisions we of necessity had to take aboard, we had embarked 40 tonnes of ballast. This had been placed close to the keelson and on either side of it. Additionally twelve of our 12 pounder cannons had been stowed in the pump-well (we had but 14 mounted on deck). All this weight below the centre of gravity and close to the keelson put the masts in danger whenever the ship rolled.

Because of these shortcomings, I decided to have the excessive height of the masts reduced and to lighten the ship by 20 tonnes, this was to be achieved from the hold and from on deck by changing our armament for cannon of smaller calibre. The beam of the vessel alone made this necessary for she was 2 feet shy in the beam of frigates built to carry 12 pounders.

Despite these changes I was very much aware that my ship was not fit to operate in the sort of seas found around Cape Horn. I had become aware, during the storm, that she made water through her upper-works and I realised the risk this posed of causing damage to the biscuit; a loss we would have no means of remedying during the course of the voyage we were about to undertake. Therefore, I asked permission to send the Boudeuse back to France from the Falkland Islands under the command of Chevalier Bournand, my senior lieutenant, and to continue the voyage with the store-ship l'Etoile alone. This permission was granted and on the 4th of December, our top hamper having been repaired, the artillery exchanged and the ship's entire upper-works re-caulked I sailed out of the port and anchored in the roads where we took on powder and set up the shrouds.

Departure from Brest.

On the 5th we set out from the mooring at Brest. I was forced to cut my anchor cable thirty yards from the anchor due to there being a stiff easterly wind and an ebbing tide which conspired to prevent me turning quickly; making me consider we might be blown too close to the shore.

My wardroom comprised eleven officers, three of them volunteers. The crew comprised 203 men including seamen, petty officers, soldiers, midshipmen and servants. Additionally, the Prince of Nassau-Siegen had obtained permission to accompany us. At 4 o'clock in the afternoon the Isle of Ushant bore North $\frac{1}{4}$ N East, at a distance of about $5\frac{1}{2}$ leagues, from that position we made our departure.

During the first days we experienced constantly favourable winds from West N West or South East. On the 14th, at 7 o'clock in the evening, the wind being quite fresh from East S East with a heavy

swell running, the ship rolled heavily causing the end of the port main-yard to enter the sea for a distance of about 2 feet. The yard being so loftily elevated, this was a circumstance that we had previously thought impossible.

Description of Salvage Island.

On the 17th we sighted Salvages Island then, on the 18th, Las Palmas and on the 19th, Iron Island. What is known as "The Salvages" is a small island about one league in breadth from east to west. It is low-lying in its centre but at its extremity there rise up some small hillocks. A chain of rocks, some of which appear to be below sea-level, extend the shoreline eastwards for a distance of 2 leagues from the island. On the eastern side there are also some submerged rocks, but, they do not extend very far. Our sighting of this reef alerted us to a serious error in our estimated position. The full extent of this was only made clear to us when we arrived at the Canary Islands; their position having previously been exactly determined.

Error in the reckoning of our position.

The sighting of Iron Island provided with complete reliability the correction I was waiting for. On the 19th at noon my observed position was 28° 02' north latitude and, taking into account the compass bearing of Iron Island I had observed at that same hour, I noted a difference of 4° 07'. This being equivalent, at 28° 02' north to 72 leagues. Our position was, therefore, further advanced than I had estimated. An error of this nature is often made during the crossing from Cape Finisterre to the Canaries. I have since experienced the same phenomenon during other voyages, it is probably due to the currents which run so strongly eastward in the vicinity of the Straits of Gibraltar. It was at this same time that I realised that the position given for Salvages Island, on Mr Bellin's chart, is also incorrect.

Position of The Salvages corrected.

Indeed, on discovering this on the afternoon of the 17th we found that according to our observations there is a difference of 3° 17' in an easterly direction. However, on the 19th, by correcting our fix relative to Iron Island, whose latitude has been determined by astronomical observations, we found it to be 4° 07'. It must be remembered that during the 2 days, between the sighting of Salvages Island and Iron Island, we had sailed with an open sea wind that was fresh and quite constant. Consequently, we are sure, during this time, there was but little error in the estimated course we followed. Additionally, on the 18th, we raised Las Palmas on a corrected bearing South W ¼ West. According to Mr Bellin it ought to have been South-West of us. I was in a position, from these 2 observations, to conclude that Mr Bellin has placed the Salvages 32' further to the east than they really are. Also, on the English chart of Mr Halley, Salvages Island has been located 30 leagues further to the west than the position shown by Mr Bellin.

At noon, on the 19th of December we set sail once again. With the following exception no events worthy of note occurred during the passage [from the Canaries] to our anchorage in the River Plate.

1767. January.

Nautical observations.

1. On the 6th and 7th of January 1767, we being between 01° 40' and 00° 38' north and 28° longitude west, we saw many birds; this caused me to think we should be on the lookout for *Penedo San-Pedro*, even though it was not shown on Mr Bellin's chart.

Crossing the line.

2. On the afternoon of the 8th of January we crossed the equator between 27° and 28° longitude west.

Remarks concerning the variation.

3. Since the 3rd of January we had been unable to record the variation, though we had estimated it from the chart of William Mountain & Jacob d'Obson. On the 11th at sunset we observed 3° 17' north-east variation. On the 14th, in the morning, I again observed using an azimuth compass 10° north-west, our position being 10° 30' south latitude and about 33° 20' longitude east of the Paris meridian. It is therefore certain, I assuming my estimate of the longitude was accurate because I had verified it at our landfall, that the line of zero variation has moved even further to the West since the time when Mountain & d'Obson made their observations and it seems that the progress Westward of this line is quite uniform. Indeed, at the same parallel where William Mountain & Jacob d'Obson had found a difference of 13° within an interval of 44 years, I had found there a difference of a little more than 6° after a gap of 22 years. This progression is worth of a series of further observation in the future. The discovery of a law governing the declination of the magnetic needle will perhaps, besides giving a means for determining longitude, lead us to understanding the causes of this variation and and maybe even what purpose the magnetism serves.

Causes of the changes that have been noted during the crossing to Brazil.

We had observed, almost constantly, quite large northerly differences both to the north and to the south of our track, although it was more usual for them to be toward the south. We had reason to suspect the cause for on the afternoon of the 18th January we passed through a shoal of fry which appeared as a pale bluish line about 2 yards wide and stretching as far as the eye could see from South E ¼ East to North E ¼ East. As a result of this encounter we concluded that over the last few days the current was flowing North E ¼ East, due to the fact that all fish spawn on the coasts from where the currents detach them from their bed and at high tide carry them away. Upon studying the northerly differences, of which I spoke previously, I had not considered that the westerly differences need to be taken into account.

Since the 27th of January our soundings were finding bottom and on the evening of the 29th we sighted land. We could not determine what it was as night was coming on and along this coastline the land is low-lying. The night was one of poor visibility with rain and thunder. This caused me to ponder the following:

Over a long period of time many navigators have complained, and are complaining still, that the charts, those of Mr Bellin in particular, show the Brazilian coastline too far to the East. They base this on the fact that in their various crossings they have sighted the coast when they believed themselves to be 80 leagues distant from it. They add that they have experienced, on several occasions in this part

of the Atlantic, currents that have carried them to the south-west. They consider it more likely that chart and astronomical observation errors are the cause, rather than their own [incorrect] estimation of their position. During our crossing to the River Plate, we would have been able, by similar reasoning, to conclude the opposite if a chance observation had not shown us the reason for the northerly differences we had experienced. It was clear to us that the shoal of fry we had seen on the 29th ⁸ were aligned with the direction of the current and that their distance from the coast proved the current had been flowing for several days. This then was the cause of the constant errors in the estimates of our position. The currents that navigators had often experience setting to the south-west in this region are subject to variations and sometimes set in the opposite direction. Based on this reasoned observation and that our course had been almost south-west, I considered it justified to correct our errors of distance by squaring them with our observation of latitude and not by the direction of the wind. I owe this measure to having sighted land at almost the same time as my estimate indicated I would do so.

Would those of us who have calculated our progress westwards from the daily log of distance run, being satisfied in correcting latitude by means of daily noon sights and then, when they sight land long before they expected to see it, have been right in concluding that the coast of Brazil is further to the West than is shown on Mr Bellin's charts?

In general the variable currents in this region most frequently to south-west, however, they sometimes set to the north-east. A glance at the nature of the coastline here is enough to prove that it is only possible for them to flow in one or other of these 2 directions and it is always easy to determine which at any particular time by the differences, north or south, given by observations of latitude. It is to these currents that are due the errors of which navigators complain. I believe that the position of the Brazilian coast as shown by Mr Bellin is correct. I am also convinced that the longitude of Rio de Janeiro has been accurately determined by Messrs' Godin and the *Abbé de Caille* (who met here in 1771) and also by those observations made by Fernambuc at Buenos Aires.

Having established these 3 points there is no reason for concern regarding position in longitude of the eastern seaboard of South America from the 8th to the 35th parallel of south latitude. This is what experience has since confirmed.

Entry into the River Plate.

Since January the 27th we had obtained soundings and on the evening of the 29th we sighted land, but were unable to identify it as the daylight was almost at an end and the land of this coastline is very low lying.

That night visibility was poor with rain and thunder. We came up into the wind under fully reefed topsails and with all way off the ship we rode with our head towards the open sea. On the 30th the first pale rays of dawning gave us a glimpse of the mountains of Maldonado and so we were easily able to identify the land we had seen the previous evening as being Lobos Island.

Correction to Mr Bellin's chart necessary at this location.

However, as our latitude at entry was 35° 16' 20" south, we believed it to be *Cap Saint Marie* which Mr Bellin places at 35° 15' south, while its true latitude is 34° 55' south. I draw attention to this false

⁸ Previously he gives the 18th as the date of this sighting, which seems to be correct. -JFF

position because it is of a dangerous nature. A ship proceeding in a southerly latitude of 35° 15' believing himself to be in sight of *Cap Saint Marie*, would run the risk of grounding on the English Bank before correctly identifying the land; notwithstanding, he ought to be made aware of approaching danger by his soundings. Close to the bank there exists no more than five fathoms of water. The French bank, in reality an extension of *Cap Saint Antoine*, make it even more dangerous when one is at the southern point of the bank as, in that location, there still remains eleven to twelve fathoms.

The Maldonades anchorage.

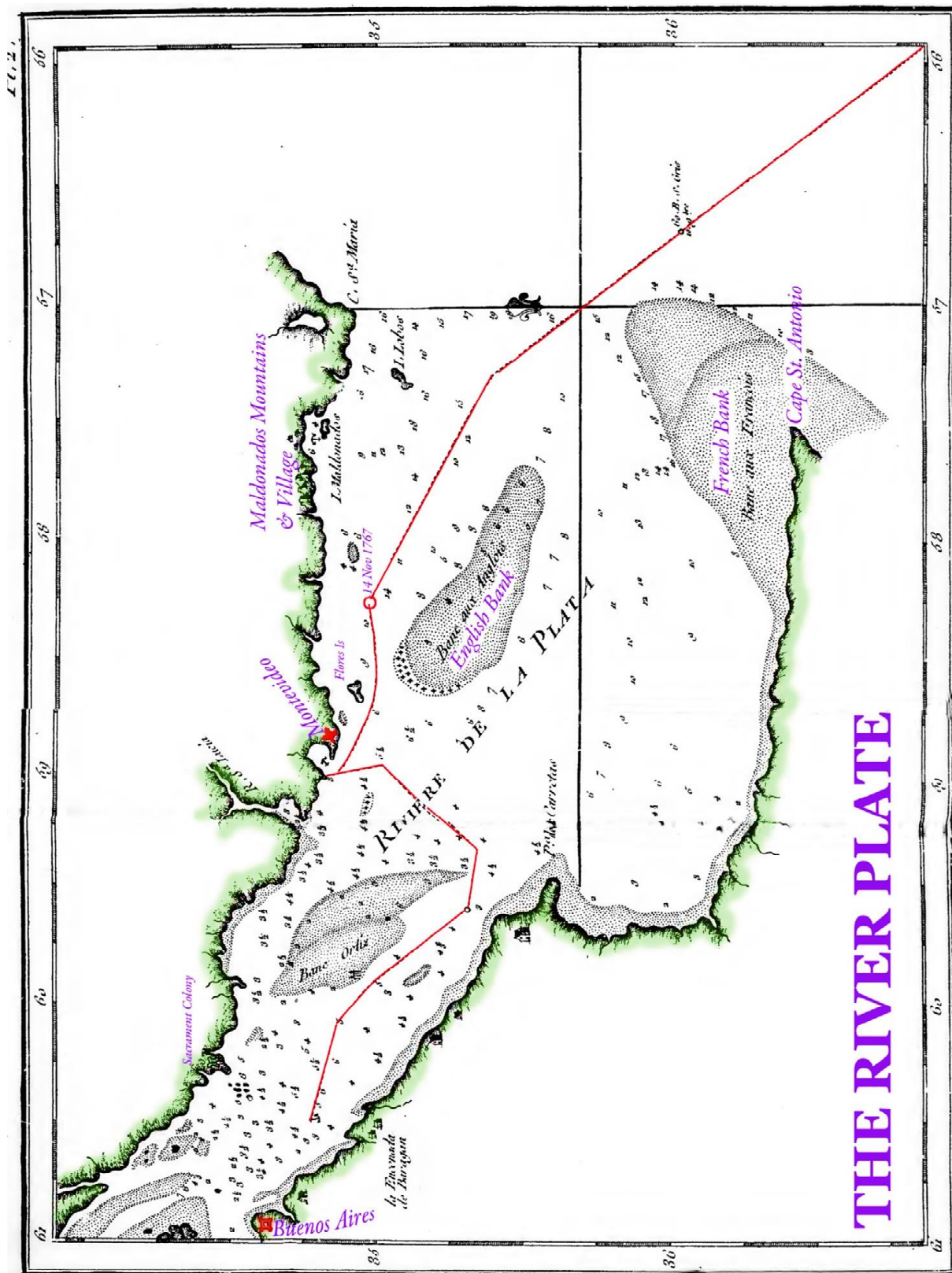
This region, known as Maldonado, is the first high ground that is seen to the north after having entered into the River Plate. It is virtually the only elevated ground one sees until one arrives almost in Montevideo. To the east of these mountains there is an anchorage on a low-lying stretch of coast in is a shallow bay, partly protected by a small island. The Spaniards maintain a garrison in a fortified town at Maldonado. There is there a gold-mine producing only low grade ore which has been worked for some years and where stones of an almost perfect transparency are found.

At a distance of 2 leagues from the coast a new town, Pueblo Nuevo, has been built; this place is inhabited almost exclusively by Portuguese deserters.

The anchorage at Montevideo.

On the 31st at eleven o'clock in the morning we anchored in Montevideo Bay in 4 fathoms⁹ of water on a ground of soft black mud. We had passed the night of the 30th and 31st, 4 to 5 leagues east of Flores Island, lying to a single anchor in 45 feet of water on the same type of ground. The 2 Spanish frigates designated to assume possession of the Falkland Islands had been lying in the same roadstead for a month.

⁹ The French units "*Brasses*" are actually used. A "brass" is about 5 foot, while a fathom is 6 foot. For convenience I have used fathoms for brasses throughout. Consequently, when depths are given, the true depth is a little shallower than stated.-JFF



THE RIVER PLATE

February.

The officer commanding these vessels was Don Philippe Ruis Puente, a full captain, he had been appointed governor of these islands [the Falklands]. We went together to Buenos Aires to discuss with the governor general, don Francisco Bucarelli, the measures it would be necessary to take for the closure of the French establishment and its hand over to the Spanish. We stayed there but a short time and I was back in Montevideo on the 16th of February.

Journey overland from Buenos Aires to Montevideo.

To reach Buenos Aires the prince of Nassau and I had taken passage up river in a schooner; but, to make our return, because the wind was against us, we crossed the river at a point upstream of the colony of Saint-Sacrament which is situated directly opposite Buenos Aires, and then made our way back by road to Montevideo where we had left the frigate.

We made our way across immense plains directing our course by eye alone, but, taking care not to miss the fords, the sole locations where rivers can be crossed. We drove ahead of us 20 or 30 horses from which herd we lassoed fresh mounts when our horses tired. We sustained ourselves on meat that was almost raw and passed the nights in small cabins constructed from hides. Our sleep was constantly disturbed by the howling of tigers [sic] prowling around our encampment.

For the rest of my life I will never forget the manner in which we crossed the Saint Lucia River, a stream both deep and swift-flowing, at a location where it is even wider than the Seine opposite Les Invalides. We were made to get into a long and narrow canoe of which one of the gunwales was half as high again as the opposite one. Then two horses were driven into the water, one to the port, one to the starboard side of the canoe. The boatman, utterly naked, a wise precaution but one ill-conceived to reassure those of his non-swimming passengers, did his best to hold the heads of the horses above water, they whose task it was to swim us to the opposite bank; that is, if they possessed the strength required to so do!

Don Ruis arrived at Montevideo a few days after we did. At this same time two schooners came alongside us; one carried timber and refreshments, the other biscuits and flour which we took on-board to replenish that which had been consumed since our departure from Brest. We employed our stay in Montevideo to caulk the hull, to repair the wear that had been caused to our sails during the crossing and to refill the ships water casks. We also struck all of our cannon below decks, save four that we retained for signalling purposes. This gave us more space on-deck to embark a greater quantity of cattle.

The Spanish frigates, having also made similar arrangements, we prepared to sail from the River Plate.

CHAPTER II

Details of the Spanish establishments in the River Plate area.

1767.

An is error made concerning the river's source.

Rio de la Plata or The River of Silver does not go under the same name for its entire course. It rises, it is said, at Xarages Lake situated at about 16° 30' south where it is called the River Paraguay; a name it retains in much of the land through which it passes. It joins the River Parana at about 27° south, the name of which river it then assumes. From there it flows due south unto 34° south where it is joined by the River Uruguay after which it flows eastwards to the sea as the River Plate.

The Jesuit geographers, who first attributed Lake Xarages as its source, were wrong as later were other writers who followed their example. This lake, which they sought in vain, is nowadays considered to be mythological. The Marquis de Valdelirios and Don George Mendesès were appointed by Spain and Portugal respectively to determine who owned the various regions of these two countries. Between 1751 and 1755 they sent officers into every part of this part of South America. A Spanish party went up the River Paraguay with the intention of finding Lake Xarages. The Portuguese, for their part, set out from Matagrosso, one of their outposts on the internal Brazilian frontier at 12° of south latitude. They took boats onto a river called Carourou, was shown on the Jesuit's charts as flowing into Lake Xarages. Both parties were astonished when they met one another, having not having seen any lake on the River Paraguay at 14° south latitude. What had been taken for a lake turned out to be a vast area of low-lying land that flooded when, at certain times of the year, the river overflowed. The River Paraguay or Plata rises somewhere between 5° and 6° south latitude at about an equal distance from the two seas and in the same mountains where rises the River Madera; a stream that later adds its waters to those of the Amazon. The source of both the rivers Parana and Uruguay is in Brazil. The River Uruguay in the region of Saint Vincent and the River Parana close to the Atlantic Ocean in the mountains East N East of Rio de Janeiro from where its waters flow first westwards before turning toward the south.

When the first Spanish establishments were founded.

In the works of the Abbé Prevost is to be found the history of the discovery of the River Plate, an account of the obstacles the Spanish encountered and details of the first establishments they founded in the region. Here one sees Diaz de Solis amongst the first on the river in 1515. It was his name that was first given to the river and this was retained until 1526 when Sebastian Cabot gave it the name *de la Plata*, or, River of Silver in recognition of the silver he obtained from the inhabitants. Cabot constructed the fort called Saint Esprit on the River Tercero 30 leagues upstream of the confluence of the Paraguay and Uruguay. This establishment, however, was destroyed only a short time after it was built. Don Pedro de Mendoza, the emperor's representative was sent to the River Plate in 1535 where, under difficult circumstances, he erected the first buildings at what is now Buenos Aires on the right-hand bank of the river and several leagues downstream of its confluence with the R. Uruguay.

His expedition was one long catalogue of disasters which ultimately resulted in his death. The inhabitants of Buenos Aires were constantly under attack by Indians and, beset by starvation, were forced to abandon the site and retire to Assumption. This town today the capital of Paraguay, having been inaugurated by Mendoza; it subsequently developed rapidly on the South bank of the river 300 leagues from its mouth. Finally, Don Pedro Ortiz de Zarate, Governor of Paraguay, rebuilt Buenos Aires in 1580 in the same location where the unfortunate Mendoza had started it. Here he set up his residence which became an entrepot for ships arriving from Europe. Later it became the capital of the entire region; the seat of a bishop and the residence of the governor general.

Location of the town of Buenos Aires.

Buenos Aires is situated at 34° 35' south latitude, longitude 60° 05' west from Paris. This position has been determined by astronomical observations made by P Feuillée.

Its population.

Buenos Aires is well laid out town and is in fact much bigger than it appears at first sight; bigger, in fact, than it needs to be when one takes into account the number of its inhabitants which does not exceed 20,000, including whites, blacks and people of mixed race. The ordinary habitations give the town its predominant character for; disregarding some convents, public buildings and a few large private houses, they are squat and never rise to more than a single story. They do, however, have large courtyards and the majority have gardens.

There is a citadel on the waterfront where the government buildings are located. These buildings form one side of the main square where a daily public market is held. On the opposite side are located the town hall, the cathedral and the palace of the archbishop.

This town does not have a port.

There is no port at Buenos Aires, not even a mole to facilitate the boarding of ships. The closest that vessels can get to the town is a little more than 3 leagues. Cargoes are discharged into small schooners then, by entering a small river named Rio Chuelo, the merchandise is loaded onto waggons and transported into the town at a distance of a quarter of a league. Those ships that are to be careened or need to embark cargo are required to go to the Ensenada de Baragan, a port 9 or 10 leagues to the south-east of Buenos Aires.

Religious houses.

In Buenos Aires there are many religious establishments, some of them for men, others for women. All year round there are frequent religious festivals when the days of various Saints are celebrated by processions and firework displays; during which spectacles, religious ceremonies and celebrations are performed. The monks name the leading ladies of the town Major-domos in honour of the founding mothers of the place and of the Virgin Mary. This title gives them the right to decorate the church, to adorn the statue of Christ and to wear the habit of their order. To a foreigner it is a most unaccustomed sight to see women, of all ages, in the churches of Saint Francis and Saint Dominic, performing the holy offices and wearing the apparel of holy instructresses.

But, compared to them, the Jesuits offer to the pious women in their order a more austere road to sanctification. They have established in their convents a house which they call, "*Casa de los ejercicios de las mujeres*", which is to say "the house of female submission". Wives, women and girls come here, irrespective of the wishes of husbands or parents, to become sanctified by isolating themselves from the outside world for twelve years.

They are housed and fed here at the expense of the order. Men are barred from entering this sanctuary unless they wear the order of Saint Ignatius. Servants, even those of the same sex, are not permitted to accompany their mistresses. The indoctrination practiced in this place consists of meditation, praying, recital of the catechism, confession and flagellation. We had pointed out to us the blood-stained walls of the chapel resulting, we were told, from the self-inflicted penitence of these initiates.

Brotherhood and the processions of Negroes.

Concerning the ordinary citizens; the charity of the monks excludes nobody. Services are held for the slaves and the Dominicans have established a brotherhood for the Negroes. They have their own chapels, their own masses, their own festivals and they are given a decent burial when they die. All of this for a trifling 4 reals per year charged to each catholic Negro.

The Negroes have adopted Bernard of Palpepne and the Virgin Mother as their patron saints; perhaps because of the following scriptural words: *nigra sum sed Formosa, silia [filiæ] Jerusalem*.¹⁰

On their feast-days they elect two kings; one of them represents the king of Spain the other the king of Portugal; each of these kings then chooses a queen. Two groups, all finely clothed, form up and then follow behind these kings bearing in procession: crosses, banners and musical instruments. The two groups sing and dance, engage in mock combat and chant the litanies together. This festival, which lasts from morning until evening-time, is a most enjoyable spectacle.

That which is produced beyond the limits of the town of Buenos Aires.

The lands beyond the limits of Buenos Aires are well developed agriculturally. Almost all the inhabitants of the town own properties in the countryside called *quintas*; here they produce all the food they need to sustain themselves. Wine however, they either import from Spain or obtain from the Mendoza vineyard located some 200 leagues from Buenos Aires. The cultivated areas do not extend very far and if one travels about 3 leagues from the town there is only an immense and untouched landscape, abandoned to an uncountable multitude of cattle and horses.

When journeys have to be made across this vast country small thatched buildings might sometimes, but only rarely, be stumbled upon. Their purpose is not to make the region habitable but to establish the proprietor's rights of ownership, or rather those of the beasts they provide shelter for. Travellers find no lodging places here; they are obliged to sleep in the waggons that are the only vehicles available for making long journeys. Those who choose to go on horseback, known as "travelling light" are, more often than not, compelled to sleep exposed in the open fields.

¹⁰ I am black but beautiful, daughters of Jerusalem.

Abundance of livestock.

The entire country is totally flat; there are no mountains and no woods except for orchards of various fruit trees. Benefiting as it does from a most favourable temperature, this land could be the most productive in the world were it to be cultivated. The small quantity of wheat and maize that is sown here returns a far heavier crop than even the best land in our native France. Despite the earth crying out to be cultivated, everywhere the land remains untilled; be it close to inhabited regions or far away from them. If, by chance, some farmers are met up with they are invariably Negro slaves. Everywhere else, horses and cattle are in such abundance that a steer will be killed to eat only what can be eaten on the occasion. The remainder abandoned to the wild dogs and tigers which are the only dangerous animals in the country.

Dogs were brought here from Europe, but, because it is so simple a matter to find food here, they have forsaken the dwellings of their former masters. Now, in their wild state, they have multiplied beyond measure. They hunt in packs to attack cattle and, if they are emboldened by hunger, they will even attack a man mounted on horseback. The tigers are not numerous and they live only in the wooded areas which are confined to the banks of rivers. The skill of the locals with the lasso is well known and it is beyond doubt that there are Spaniards who do not shrink from ensnaring even a tiger; even if, from time to time, this results in them ending up as a meal for these ferocious beasts. I once saw, in Montevideo, a species of tiger-cat which had quite long light-grey fur. This animal had quite short legs and was about 5 feet long. It is a very dangerous animal, but, happily, also very rare.

Scarcity of timber and the means by which it is obtained.

Timber is scarce and very expensive both at Buenos Aires and at Montevideo. The only locally produced wood is scarcely fit for burning. Timber that is used for house construction, shipbuilding or the refitting of vessels is sent by barge from Paraguay.

Details concerning the Americans of this country.

The aboriginals who inhabit this part of the Americas, both north and south of the River Plate, are those who have not yet been subjected to the dominion Spain. The Spanish call them *Indios Bravos*. They are short in stature, extremely ugly and almost all of them are afflicted with scabies. They are dark skinned and they continually smear their bodies with grease which makes them appear darker still. They have no other clothing than a long coat of improperly cured squirrel skin descending to their ankles in which they wrap themselves. The fur of the skins with which these coats are made is turned to the inside, the outer side being painted in contrasting colours. The most distinctive feature of these caciques is the band of leather they wear around their foreheads. It is cut in the form of a crown and ornamented with plates of copper. Their weapon is the bow and arrow but they also use the lasso and the bolas.¹¹ These Indians pass their lives in the saddle and have no established villages. At least, that is, not in those regions where the Spaniards are established. They visit the towns from time to time with their women to buy alcohol. This they drink without pause until they become

¹¹ The bolas is made from two round stones the size of a 2 pound cannonball and both enclosed in a band of leather. Each of them is attached at opposite ends of a 7 foot long cord. They use it from horseback like a sling, from a distance of 300 paces to bring down the animal they are in pursuit of. – de B.

intoxicated to the point of collapse. In order to buy strong drinks they sell weapons, furs and horses. When they have nothing to trade they steal from the settlements any horses they come across and then flee back into the countryside. Sometimes they form themselves into bands of two or three hundred in order to steal cattle belonging to the Spanish or to attack caravans of travellers. They rob their victims and then either slaughter them or sell them into slavery.

These Indians, in truth, are a vexatious problem having no obvious remedy; for how is it possible to civilise such a wild people in so vast and undeveloped a country and where it is impossible to know where they are located? These Indians are, however, courageous and warlike; the time has long passed when a single Spaniard was able to cause a thousand Americans to flee before him.

A Tribe of brigands, established to the North of the river.

To the North of the river a band of brigands has established itself. Unless something is quickly done to eliminate this scourge, it will soon become a real threat to the Spanish. Amongst them are criminals who have escaped from prison and established themselves to the north of the Maldonado region where they have been joined by deserters from the army. Over time their numbers have increased, they have Indian women and have propagated a race which supports itself by pillage. They rustle cattle from the Spanish dominions and exchange them with the Paulists ¹², a people located in the Brazilian borderlands, for weapons and clothing. A dreadful fate awaits those unfortunates who fall into their hands. We have been reliably informed that there are now more than 600 of them and that they have left the area they originally occupied and are now established further away to the north-west.

The geographical extent of the de la Plata government.

The Governor-General of the province of *La Plata* resides, as I previously mentioned, at Buenos Aires. For all matters of a non-maritime nature he is supposed to use the offices of the Vice-Roy of Peru; however, his remoteness makes this impractical; so, with the exception of the money that he is required to draw from the mines at Potosi, he administers all government affairs himself. Earlier this year a mint was established at Potosi and, since that time, coinage has been struck in a local style. The local governments of Tucuman ¹³ and of Paraguay depend, as do the celebrated Jesuit missions, on the Governor-General of Buenos Aires. This enormous region, in a word the possessions of Spain extend from the Andes in the east, to the River Amazon in the north and as far as the Straits of Magellan in the extreme south. At the present time it is a fact that no outposts have been established any further south than Buenos Aires.

The Spaniards go into this southerly part of their domain in order to obtain salt. Every year a convoy comprising two-hundred waggon, with an escort of 300 men, sets off to an area of natural lakes situated adjacent to the sea and located close to latitude 40° south; here they collect the naturally occurring salt found there.

The commerce of the *La Plata* province is the poorest of Spain's South American possessions. Here no gold or silver is mined and the population is so sparse that it is not practicable to exploit such minerals as do exist in the bosom of the earth. The trade undertaken in Buenos Aires today is even less than it was 10 years ago. It has considerably declined since what was then known as "The International Trade" was prohibited. That is to say since it was made illegal to export goods overland from Buenos Aires into Peru and Chile; the result of this prohibition is that the only articles exchanged with these 2 provinces today are cotton, mules and maté or Paraguay grass.¹⁴

¹² Another race of brigands in Brazil who formed themselves into a republic at the end of the 16C. -de B

¹³ A province now in the North Western part of Argentina. -JFF

¹⁴ A variety of South American holly which is used to make a drink that is stimulating and diuretic. -JFF

The wealth and influence of the wholesale merchants in Lima instigated this restriction being brought into effect, because its application has been to the detriment of the population of Buenos Aires they have formally complained about its imposition. Litigation is currently under consideration in Madrid but, I have no idea when, or even if, a judgement will be made. Nevertheless, Buenos Aires is a rich land; I have seen a registered ship sail from here carrying a million piasters. If the inhabitants of this country were permitted to export hides into Europe that trade alone would suffice to make them very wealthy indeed.

The colony of the Holy Sacrament.

Before the last war smuggling between Buenos Aires and the Portuguese province of *Saint-Sacrament*, situated on the left bank of the river almost opposite Buenos Aires, was widespread. Today, however, this place has been so confined by new defensive works that smuggling is possible only with the connivance of officials. It is even necessary, for those few Portuguese who still live there, to bring in by sea from Brazil that which they require to support themselves. To the Spanish this Portuguese foothold in this part of South America is analogous with the hold the English have on Gibraltar in Europe.

Details concerning the town of Montevideo.

The city of Montevideo, established forty years ago, is situated on the northern bank of the river 30 leagues above where it joins the sea. The town is built upon a promontory that protects a bay of about 2 leagues in length from easterly winds. At the point where entry into the bay is made it has a depth of about one league. At the eastern end of the bay stands an isolated and quite lofty hill; it has served, and still serves, as a lookout post; it is from this use that the town has taken its name.

Concerning the anchorage in this bay.

All the other ground in the vicinity is very low-lying. The landward side of the town's approaches is protected by a fortress while several batteries cover the seaward side and the anchorage. There is even a battery located on a tiny island called Frenchman's Island right in the middle of the bay. Montevideo Bay provides a safe anchorage, even so, from time to time the bay is subjected to strong south-westerly gales, known locally as *Pamperos*; these are invariably accompanied by torrential rain.

An excellent port of call for the crews.

Montevideo has its own Governor who reports directly to the Governor General of the province. The land surrounding Montevideo is almost totally uncultivated; neither wheat or maize are grown here, it is thus necessary to import flour, biscuit and other ships victuals from Buenos Aires. They do not grow vegetables in the gardens of the town or the suburbs. Here one finds only melons, marrows, figs, peaches, apples and quinces in any quantity. Cattle here are as abundant as they are in the rest of the colony. This, combined with the benevolent climate, makes Montevideo an excellent and healthy port of call for ships crews. It is necessary that careful precautions are taken to prevent desertion. Everything here beckons the sailor, immediately he sets foot on shore he becomes aware that here one can live without having to do very much work. How can he fail to make a comparison between drifting through days of peaceful idleness, basking in an almost perfect climate and the laborious, constantly dangerous life of a seaman who has no better prospects than a prematurely infirm old age of poverty and shiftlessness?

CHAPTER III

Departure from Montevideo for the Falkland Islands and the handover of them to the Spanish. Historical details concerning these islands.

February 1767.

Leaving Montevideo.

On the 28th of February 1767 we sailed from Montevideo in the company of the 2 Spanish frigates and a Tartane ¹⁵ loaded with livestock. Don Ruis and I discussed the order of sailing before we left and it was agreed that while we were in the river he should be in the van, but, once we were at sea, I should lead and set the course. In order to lessen the possibility of the ships becoming separated I put aboard each of the frigates a pilot familiar with the Falkland Islands. During the afternoon we were compelled to anchor on account of heavy fog preventing us from seeing either the mainland or Flores Island. The next day we experienced contrary winds, nevertheless it remained my intention to depart as the strength and the set of the current in this river means that this manœuvre is entirely practicable. By late in the day, still having received no confirmatory signal from the Spanish Commodore, I dispatched an officer carrying a message to him. I informed him that I had sighted Flores Island during a brief lifting of the fog and had concluded that we were moored dangerously close to the bar known as the English Bank and that, in my judgement, we should sail in the morning, contrary winds or not. Don Ruis replied that he was in the hands of the local pilot. His view, based on his own detailed knowledge, was that we should remain at anchor until the wind had moved round until it was reliably in our favour. My officer informed him that I, for my part, intended to weigh and to wait for him by either tacking back and forth in the vicinity or by mooring further to the north, so that come what may, neither the currents nor the force of the wind should cause our ships to be separated.

The tartane had not anchored that evening and, as night came on, we lost sight of her, forever as it turned out, for she turned up back in Montevideo three weeks later without having fulfilled her mission.

We are beset by strong winds while in the river.

The gale that night was terrible, the pamperos blew with such fury that our anchor started dragging. We laid out a second anchor which fortunately held the ground. When dawn broke we could see the Spanish ships despite the fact that their tops and main yards had been lowered; they had dragged even more than we had. The wind was still violent and from a direction contrary to our needs; there was a very heavy sea running and so it was not until nine o'clock that we left the anchorage under the set of our fore-mainsails.

1767. March.

By noon we had lost sight of the Spaniards who were still at anchor. We, on the other hand, were by the evening of the 3rd of March beyond the confines of the river.

¹⁵ A Tartane, known also as a Xantec, was a small sailing vessel carrying a triangular, lateen mainsail and a foresail on a bowsprit. They were used, particularly in the Mediterranean, for the transport of livestock and other cargo. -JFF

Course from Montevideo to the Falklands.

During the passage to the Falkland Islands we experienced variable winds from north-west to south-west. For almost all of the time the weather was dreadful and the sea very rough. On the 15th and the 16th we were obliged to come up into the wind because of some damage we had suffered. Our yards and booms required the most attentive handling. The frigate drifted far more than was normal and the ship had started to list so that the amount of helm she required to maintain her heading varied from one tack to the other. Due to the heavy swell we were prevented from shifting cargo to get her back on an even keel. It is a truism that long and slender vessels have a somewhat capricious nature. The trim of such ships depends on so great a number of often indefinable factors that it is very difficult to determine which of them is the cause of any one particular condition. Those mariners who have the skill and experience required are able to feel their way cautiously until they find a remedy which rectifies the problem.

Error made in the direction of our course.

From the afternoon of the 17th our soundings found bottom; a heavy fog hung incessantly about us. On the 19th, even though the horizon was not obscured by the fog, we were unable to see land even though, by my estimation, we were to the east of the Sébaldes Islands.¹⁶ I was concerned that we had sailed past the Falklands and so I decided to make a run towards the west. The wind, which in this region of the ocean would normally have hindered this decision was, on this occasion, favourable. For 24 hours we ran on at a great pace until, having made reliable soundings off the Patagonian coast, and thus having re-determined our position we again, and with confidence, resumed our course to the east. Indeed, at 4 o'clock in the afternoon of the 21st we sighted the Sébaldes bearing North E ¼ East at a distance of some 10 leagues and, soon afterwards, we were able to see the Falkland Islands themselves.

At least, other than for the time we had wasted heading back towards the American coast looking for the islands, I had got out of difficulty with little embarrassment.

On the evening of the 23rd we entered into the great bay and anchored. On the 24th the two Spanish frigates arrived and anchored there also. They had suffered great hardship during their passage. The gale of the 16th had obliged them to approach the Falklands before the wind. The Commodore's ship was struck by a heavy sea which had swept away his wine bottles, smashed asunder the windows of his great cabin and caused a great deal of water to flood the hull. Almost all the livestock destined for the colony that had been embarked at Montevideo had perished in the storm. On the 25th the three ships entered into the port and moored up.

April.

The Spanish take possession of our establishments on the Falklands.

On the 1st of April I handed over our establishments to the Spanish who formalised their ownership by raising the flag of Spain¹⁷. The shore batteries and the ships fired a twenty gun salute both at sunrise and at sunset. I read out a letter from the king to those French nationals who were living in

¹⁶ Small islands to the North East of the Falklands, now known as Steeple Jason and Grand Jason. -JFF

¹⁷ At the time I delivered the settlement to the Spaniards all the expenses that had accrued up to the first of April 1767 amounted to 603,000 livres, including 5% interest on the sums expended. Thus the catholic king's right to the Falkland Islands having been acknowledged by France, Spain was not obliged, according to the law of nations, to reimburse these costs. However, as his majesty took all the ships, boats, goods, arms, ammunition, and provisions belonging to our settlement, and, he being equally just and generous desired that we should be reimbursed for what we had laid out and the above sum was remitted to us by his treasurers, part at Paris and the rest at Buenos Ayres. -De B

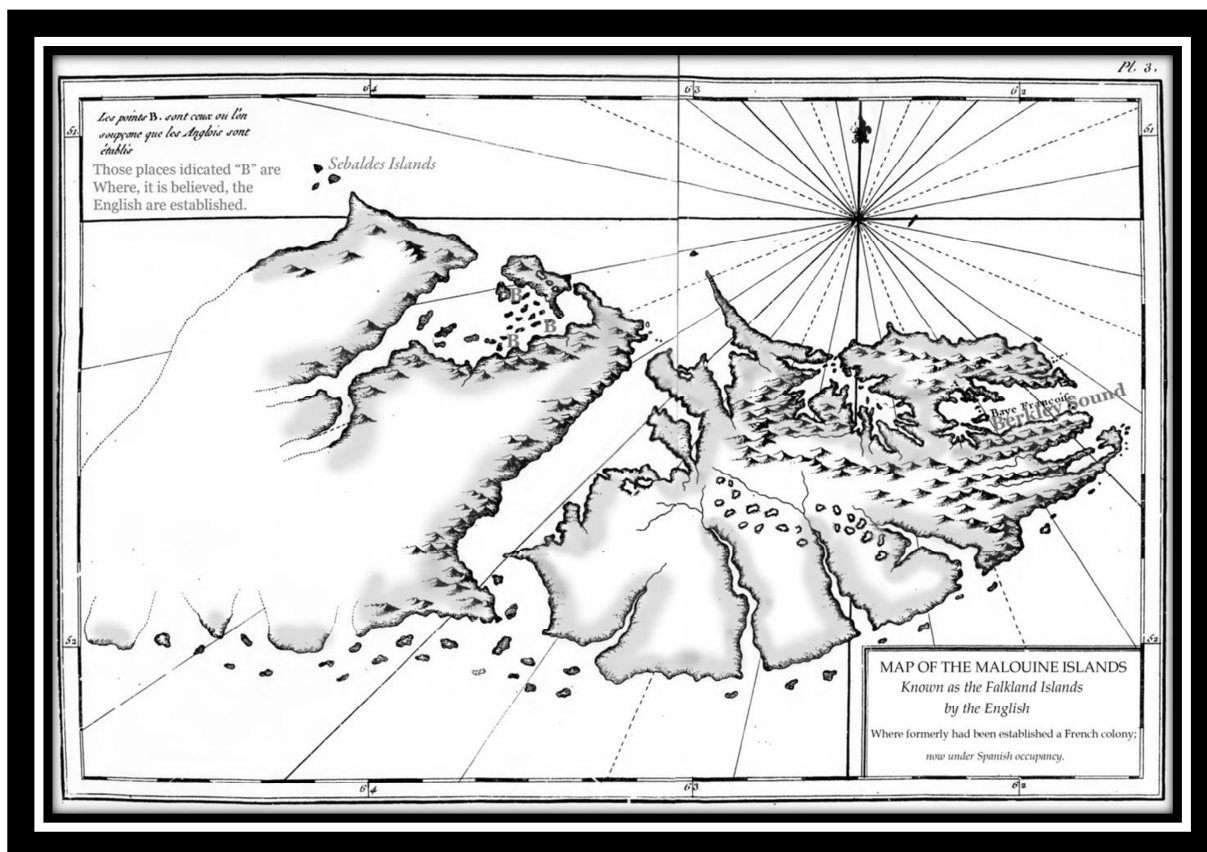
this embryonic colony. The gist of which was to confirm the king's permission for them to continue living here, subject to the domination of His Catholic Majesty¹⁸. Several families took advantage of this offer; those who did not, along with the French garrison, were embarked into the Spanish frigates which sailed for Montevideo on the morning of the 27th. For myself, I was compelled to remain, pending the arrival of *L'Etoile*, for until she arrived I was unable to continue the voyage.

Historical details concerning the Falklands. Discovery by Americo Vespucci.

If I may be so permitted, I will now make some remarks on the history of these islands. It seems to me that the first discovery should be attributed to Americo Vespucci who, on his 3rd voyage of discovery to the Americas had sailed along northern coastline of the Falkland Islands. In truth, however, he did not know if it was an island or part of the continent. Nevertheless, from the description he left us of his course, the latitude he came into and the nature of the coastline, it is easy to deduce that it was the Falkland Islands. I am certain of this based on no less evidence than that of Beauchesne Gouin who, when returning from the South Pacific in 1700, had anchored in the southern part of the Falklands while believing himself to be at the Sebaldes.

Other navigators, French & English, were aware of it before he was.

Beauchesne's journal relates that after having given his name to the first island he discovered, he moored at the southern extremity of the Sebaldes. My immediate observation on this is that the



¹⁸ Spain must have soon regretted their magnanimous defrayal of French crown's and Bougainville's personal outlay resulting from for the creation of the Falklands colony. On September 16th 1771 the Captain of HMS Juno reclaimed possession of the islands for Great Britain.-JFF

Falklands, because they are situated between the Sebaldes and Beauchesne Island and because the Falklands have an appreciable extent, he must also have come across the Falkland's coast for it is impossible not to see them when moored to the east of the Sebaldes.

However Beauchesne saw a single large island and it was only after he had left that he saw the two smaller ones. He sailed in sight of a land covered with pools and lakes of fresh water that abounded in geese, teal, duck and woodcock, but, he saw no trees growing there. All the foregoing is exactly in accordance with the nature of the Falkland Islands. The Sebaldes, on the other hand, consists of four small stony islands where, in 1683, William Dampier had vainly sought water and had been unable to find a good anchorage.

Whatever the case, right up to our own time the nature of the Falklands has only been imperfectly known. The majority of accounts describe them as being well wooded.

Richard Hawkins, who had approached the southern coast and had named the islands Hawkins's Virginia and gave a quite detailed description of it. He claimed that it must be populated because he had seen fires there. At the beginning of the century the *Saint-Louis*, a ship from Saint-Malo, anchored on the south-east side in an ill-suited bay protected by some small islands named, after the owner of his ship, the Anican Islands,. He stayed only long enough to take on water and did not bother to make a reconnaissance.

The French colonise the islands.

However, the suitability of the place, as a port of call for ships bound for the Pacific and as an intermediate base for the discovery of the southerly lands, had struck navigators of all nations. At the beginning of the year 1763 the French court decided to make a settlement in these islands. I suggested to the minister that I should establish it at my own cost. Thus, supported by Messrs' de Nerville and d'Aboulin, the one my first cousin and the other my uncle, we straightway set out to construct and equip the Eagle (*l'Aigle*) and the Sphinx (*le Sphinx*) at Saint-Malo. The Eagle was a vessel of 20 cannon the Sphinx one of 12. The work was in the care of Mr Duclos Guyot, today my second-in-command. The ships were to be equipped with all necessities for a voyage of this nature. We took on board several families of hardworking and intelligent country folk. These good, but often near destitute, citizens; the sort of people so dear to France for the unshakable loyalty they express towards her. On the 15 of September 1763 I sailed from Saint-Malo in company with *l'Aigle* and with Mr de Neville embarked.

After two ports-of-call, one at St. Catherine's Island off the Brazilian coast, the other at Montevideo, where we embarked many horses, cattle, sheep and goats¹⁹; we raised, on the 31st of January 1764, the Sebaldes Islands and I entered the large area of water enclosed by the north-west point of the Falklands and the Sebaldes Islands. But, not having found there any good anchorage, I sailed along the northern coast.

Having got to the extreme easterly extent of the islands I went into a large bay which seemed to me a good place for our first establishment.

The same illusion that had caused Hawkins and others to believe that the islands were covered with trees had also deceived members of my own crew. We saw, with surprise, that what we had taken for trees upon seeing the island from a great distance, were no more than tufts of tall rushes grouped closely together. Their stalks, from the foot up to a height of 6 feet had dried out and taken on the colour of dead grass; above that there were sprays of lush green growth, this combined to give them the aspect of medium height woodland. These rushes only grow adjacent to the shore and on the small islands. The mountains on the large island are, in places, entirely covered with bracken which from a distance is easily mistaken for small trees.

¹⁹ Bougainville uses the term "*bêtes à corne*" (horned livestock). -JFF


The various investigations into the nature of the island which I immediately ordered and undertook myself, revealed neither trees nor any trace that any ship had ever landed there. We did find an abundance of good peat that we would make use of in place of wood both for heating the houses and the forge. We walked over great levels of it which were interspersed with rivulets of perfectly pure water. Nature had, however, provided nothing more for men's subsistence than fish and a few species of land and aquatic animals; in truth, game was abundant and easily caught. It was an amazing sight to see the animals, until then the sole inhabitants, approach us without fear. They showed no more than a mild curiosity toward any object they had never before seen. The birds allowed us to pick them up; some of them even perched on the people when they remained stationary. Hence it is true that, to animals at least, man has not about him the immediately recognisable distinctive stamp of someone who lives only by preying upon them. This misplaced confidence was of short duration only. They very soon learnt to be wary of their cruellest enemy.

The first year.

On the 17th of March I had determined the site for the new colony. In the beginning it was comprised of only 27 people, there being amongst them 5 women and 3 children. We immediately started work to build them cabins thatched with rushes, a storehouse and a little fort in the centre of which was set up an obelisk. An effigy of the king decorated one of its sides and beneath it we buried some coins and a medallion which had, on one of its sides, the date of the enterprise and, on the other, the king's face and the epitaph: *Tibi serviat ultima Thule*.²⁰

This is the inscription on the medallion.

With the words *CONAMUR TENUES GRANDIA* as an epitaph.


ÉTABLISSEMENT
DES ISLES MALOUINES,
SITUÉES AU 1^{er} DEG. 30 MIN.
DE LAT. AUST. ET 60 DEG. 10. MIN.
DE LONG. OCCID. MÉRID. DE PARIS ,
PAR LA FRÉGATE L' AIGLE, CAPITAINE
P. DUCLOS GUYOT, .CAPITAINE DE BRULOT,
ET LA CORVETTE LE SPHINX, CAPIT. F. CHÉNARD
DE LA GIRAUDAIS, LIEUT. DE FRÉGATE, ARMÉES PAR
LOUIS-ANTOINE DE BOUGAINVILLE, COLONEL D'INFAN-
TERIE, CAPITAINE DE VAISSEAU, CHEF DE L'EXPÉDITION, G.
DE NERVILLE, CAPITAINE D'INFANTERIE, ET P. D'ARBOU-
LIN, ADMINISTRATEUR GÉNÉRAL DES POSTES DE
FRANCE : CONSTRUCTION D'UN FORT ET D'UN
OBÉLISQUE DÉCORÉ D'UN MÉDAILLON DE SA
MAJESTÉ LOUIS XV. SUR LES PLANS D'A.
L'HUILLIER, INGÉN GÉOGR. DES CAMPS
ET ARMÉES, SERVANT DANS L'EXPÉ-
DITION; SOUS LE MINISTÈRE
D'É. DE CHOISEUL, DUC
DE STAINVILLE. EN
FÉVRIER 1764.

²⁰ And the widely extended globe receive thee. -JFF

Additionally, in order to encourage the colonists and increase their confidence in the support they would receive in the future, Mr de Nerville agreed to stay with them as their leader and share the hazards of life in this frail outpost at the edge of the universe; the most southerly human establishment in the known world.

On the 5th of April 1764, I solemnly took possession of the islands in the name of the king and, on the 8th, I set sail for France.

The second year.

On the 5th of January 1765 I once again saw my colonists and I found them to be in good health and content. After having discharged the materials that I had brought for their support I went into the Straits of Magellan to find timber and saplings for building construction and fencing. In this manner I established a local means to supply the necessities for the maintenance of the colony. At the time I left the Falklands, on the following 27th of April, the colony consisted of 24 persons; this number included their governing members.

It was at this time that I made contact with the ships of Commodore Byron, who having made the first reconnaissance of the Falklands, had gone through the Magellan Strait and entered the Pacific Ocean.

In 1765 we sent *l'Aigle* back to the Falklands and the king sent a store-ship, *l'Etoile*, to join her. These two vessels, once they had discharged supplies and new colonists, went into the Straits of Magellan to obtain timber for the use of the colony. From that time on the colony began to take shape; the Commander and the Supply Officer lived comfortably there in their stone-built houses. The general population dwelt in houses, the walls of which were made of turves. There were 3 store-houses used both for public and private commodities. The timber we had brought from the straits had served for the construction of the framework for these various buildings and also for two schooners suitable for surveying the coastline.

L'Aigle returned to France from this last voyage with a cargo of oil and seal-skins which had been locally tanned. Several trials had been made to cultivate the soil and we had every reason to expect these would be successful. The greatest part of the corn we had brought from Europe proved to be readily naturalized to the conditions here and increase in the stock of cattle could be depended upon. By this date the number of inhabitants amounted to about one hundred and fifty.

The English arrive and establish themselves in another location.

However, as I have just mentioned, commodore Byron came in January 1765 to survey the Falkland Islands. He touched to the westward of our settlement, in a port which we had already named *Port de la Croisade*. He took possession of these islands for the crown of England without leaving there a single inhabitant and it was not before 1766 that the English sent a colony to settle in *Port de la Croisade* region, which they had named Port Egmont.

One Captain MacBride of the frigate *Jason* came to our settlement at the beginning of December in that same year. He claimed that these lands belonged to the king of England and threatened to take possession by force if we should continue to obstruct his claim; he paid our governor a visit, and sailed away again the same day.

Such was the state of the Falklands, when we put them into the hands of the Spaniards. Their prior right having been recognised by the fact that it was they who had established the first settlement.

An account of the productions of these isles, and the animals which are to be found there, furnish the material of the following chapter. The information given is the result of observations made by Mr de Nerville, during his three years residence. I believe it is appropriate to include these details bearing in mind that Mr de Commerçon had not been at the Falklands and that the local natural history is of equal importance. ²¹

²¹ This work, which I now publish, was already finished when the History of a Voyage to the Falklands by Dom Pernetty was published.

Had it not been, I should have omitted the details which follow from my account. – de B

CHAPTER IV.

Details concerning the natural history of the Falkland Islands.

Any Country, but lately inhabited, is always an interesting subject even for those who are but little versed in natural history. Although the remarks of some observers may not be looked upon as authoritative, they may yet go some way towards satisfying the curiosity of those who have an interest in the system of nature.

The aspect they bear.

The first time we landed upon these islands no inviting objects came in sight and, except for the beauty of the port in which we lay, we knew not what could persuade us to stay on this apparently barren ground. On the horizon were bald mountains, the land was cut into by the sea which seemed to vie with it for possession. The fields bore a dead aspect for want of inhabitants. There were no woods for the comfort of those who would be the first settlers. All around a vast silence, now and then interrupted by the howls of marine monsters, reigned perpetually and, lastly, there was the sad uniformity which pervaded it all.

These were the discouraging aspects of the place that implied, in such dreary places, nature would refuse to assist the efforts of man. But, time and experience taught us that labour and constancy would not be without success even here. Amongst the few resources, with which nature did provide us, were several immense bays sheltered from the violence of the winds by mountains and from which poured forth cascades and streams. There were meadows covered with rich pastures sufficient for the sustenance of numerous flocks and lakes and pools to water those flocks. No dispute concerning the ownership of the place, no fierce, poisonous or irritating animals to be dreaded. There was here a great number of the most useful marine creatures, birds and fish of excellent taste, a combustible substance to offset the non-existence of wood, plants known to be efficacious against the diseases common to seafaring men, a healthy and continually temperate climate better suited to make men healthy and robust than is found in those enchanted lands where abundance itself becomes noxious and heat suppresses the will to work.

These advantages soon dispelled our first unfavourable impression and justified our attempt at colonisation. To this we should add what the English, in reference to the conditions at Port Egmont, said. They unequivocally stated that the surrounding countryside furnished everything necessary for a good settlement. The passion the English have for natural history will, without any doubt, engage them to make and to publish studies which will be, without any doubt, more scientifically exact and complete than those I offer below.

Geographical situation of the Falkland Islands.

The Falkland Islands or Malouines, are situated between 51° 00' to 52° 30' south latitude and 61° 30' to 65° 30' longitude west from Paris. They are some distance from the coast of America or Patagonia and lie between 80 and 90 leagues distant from the entrance of the straits of Magellan.

The map which we give of these islands is certainly not geographically accurate for to create such would be the work of many years. It may, however, serve to give an idea of the extent of these islands from east to west and from north to south, the position of the coasts along which our ships have sailed, the figure and depth of the great bays and the direction of the principal mountains.

The harbours.

The harbours, which we have examined, are both extensive and secure and have good holding ground. There exist small islands conveniently situated to break the fury of the waves and make them safe and easily defensible and there are little creeks in which the smallest vessels can take shelter. Small streams come right down into the sea making the taking on of fresh water very convenient.

The tides.

The tides here are subject to the conditions in the surrounding ocean. High tide never occurs at a predetermined time and is impossible to predict accurately. We can only state that before every high water the sea rises and falls three times. These phenomena are known to mariners as *varvodes*, they have a greater intensity at the times of solstices, equinoxes and at full-moon.

The winds.

In general the winds are variable, but, for the majority of the time, are either north or south-westerly. In winter-time when they come from the north-west they cause fog and bring rain. When from the west or south they bring frosts, snow and hail. Those from the south to the north-east cause conditions to be less misty but are of greater violence; however, they are not as severe as those in summer from south-east to West N West. These winds sweep away the clouds and dry out the ground but they do not start to blow until after sunrise, they then increase in intensity to become most severe when that star is at its meridian, they then decrease as it declines and disappears behind the mountains. In addition to the laws which the sun's movements impose they are affected by the rising tide which can increase their intensity and, sometimes, change their direction.

Almost every night of the year, particularly during the summertime, is calm with a clear star-filled sky. The snow-falls of wintertime, brought in by the south-west winds, are not particularly heavy. The snow remains on the summits of the highest mountains for about 2 months and for a few days longer on the lower ground. The streams never freeze, but, for a single day's duration at most, the lakes and pools freeze hard enough to support the weight of a man. The ground frosts of autumn and spring do not burn the vegetation but simply change to dew, as the sun rises.

In summer thunder is heard only rarely. We are subject to neither extremes of heat or cold, in fact, throughout the seasons there is hardly any variation in mean temperature. In such a climate, where the changing seasons affect so little our way of life, is it not to be expected that men remain healthy and vigorous? During the 3 years that we have spent here that is, indeed, what we have found to be the case.

The water.

The excellent purity of the water here is to a great extent due to the absence of polluting minerals in the ground. Everywhere water is easily obtained. There is no noxious vegetation near the streams the beds of which are generally of gravel or of sand. At a few locations water runs over peat and takes on a slight yellowish tint, this does not diminish either its quality or softness.

The soil.

There exists on all the plains a depth of soil greater than the plough has need to go. To a depth of about a foot the soil is so interlaced with the matted roots of plants that we were required to strip off a layer before cultivation could begin. This material was dried and later used as fuel. This procedure,

we discovered, was wonderful for improving the quality of the ground and we continued using it. Below the top layer there is invariably a layer of black soil 8 to 10 inches deep, and often much deeper. Below that, there is a uniformly yellow soil of indeterminate depth on a bed of either slate or stones which contains nothing calcareous. This fact we determined by testing the material with hydrochloric acid. It would appear that no calcareous material exists here for, during the excursions we made specifically to look for it, we discovered none. We found only quartz and sandstone, which not being friable, produced sparks; it even possessed a phosphorescent that gave off a sulphurous smell. Amongst the other rocks stones suitable for building are not wanting; most of the coastline is formed of them. There are strata of a very hard and small grained stone and, likewise, other strata more or less sloping which consist of slates and of a kind of stone containing particles of talc. There are likewise stones which divide into slivers and on them we observed impressions of a type of fossil shell unknown in these seas; we made grind-stones of it to sharpen our tools. The stone taken out of the quarries was yellowish and not yet come to a sufficient degree of hardness as it was possible to cut it with a knife; but, we discovered that it hardened when exposed to the air. Clay, sand, and earth suitable for making pottery and bricks are easily found.

Peat and its properties.

The turf, which is generally found above the clay, goes up a great way into the country. From whatever point one departs it is impossible to go a league without meeting with considerable strata of it. Peat is always easily distinguished by the faults in some of its faces and it was by this means we discovered some of its locations. Peat is continually formed from the remains of roots and plants in marshy places where a sharp-pointed kind of rush is invariably present. The type of turf which we extracted in a bay near to our habitation shows a face surface of twelve feet in height, thus exposed to the open air; it obtains a sufficient degree of dryness.

From this was what we made use for our fuel as it burnt well and because it's for smell is not disagreeable. Its cinders, or embers, proved superior to those of sea-coals because by blowing them it was as easy to light a candle as it is with burning coals. It was sufficient and suitable for all the works of the forge, excepting the joining of great pieces.

Fruits.

Two small fruits exist, one of which is unknown to us and looks like a mulberry. The other, no bigger than a pea, is called a *lucet* on account of its similarity to a fruit found in North-America. The plant, on which the mulberry-like fruit grows, has a creeping habit and its leaf resembles that of the hornbeam. Its branches are long and it is propagated in a similar manner to the strawberry.

The *lucet* is likewise a creeping plant bearing the fruit all along its branches which have little round shining leaves the colour of myrtle leaves. Their fruits are white coloured red on the side turned towards the sun; they have an aromatic taste and smell like orange-blossom, as do their leaves. Of this fruit we made an infusion which, drunk with milk, is very pleasant to the taste; it grows hidden among the grass and it prefers moist soil. A prodigious quantity of it grows in the neighbourhood of lakes. These are the only ones which were to be had in autumn.

The fruits, which grow on bushes, are food only for wild-fowl and children; who will eat even the worst sorts of fruit.

Flowers.

Among the other plants, which are too numerous to be studied in detail, there were many flowers all of them without smell, excepting one, which is white and has the scent of the tuberose. We likewise found a true violet that was as yellow as a jonquil. It is worth noting that we did not find any bulbous-rooted plant. Another singularity is that in the southern part of the island, where we lived

beyond a chain of hills which divides it from east to west, there were hardly any of the resinous gum-plants, but, in their stead we found an abundance of another plant of the same form but of a different green, wanting the solidity of the other, not producing any resin but having fine yellow flowers in the proper season. This plant, which was easily opened consisted, as did the other, of shoots which all spring from the same stalk, and terminate at its surface. Coming back over the hills we found just below the summit a tall species of maiden hair with leaves like sword blades but not wavy. From this plant there arise two principal stalks which bear their seeds on the underside, as do all the other species of maiden hair. There likewise grew a great quantity of friable plants having the appearance of either stones and/or vegetables. These we thought were a species of lichen; however, we put off to another time the evaluation of their use as dye stuffs.

Aquatic plants.

Regarding the submarine plants, we found them to be more of a hindrance than of any use to us. The whole harbour is covered with sea weeds, especially near the shore, which made it difficult for the boats to land. They serve no other purpose than to break the force of the waves when the sea runs very high. We had hoped to make some use of them by employing them as manure. The tides brought us several species of corallines in many shapes and having the most beautiful colours. These, together with the sponges and shells, merit being placed in the cabinets of collectors. All the sponges exist in the form of plants and are branched in such a number of different ways that it was difficult to believe them the work of marine insects. Their texture is so compact and their fibres so delicate that it is inconceivable how these animals can lodge within them.

Of the shells.

The coasts of the Falklands have provided the collectors in Europe with several new shells. The most curious amongst them is called *la poulette* or *Poult*. There are three varieties of this bivalve; among them being a striated one never before been seen, except as a fossil. This may prove the assertion that fossil-shells, found above sea level, are not *lusus naturæ* ²², and accidentally formed, but that they have truly, at some time in the past when the land was under the sea, been inhabited by living animals. Along with these shells, which are very common here, there are limpets, esteemed on account of their fine colours, whelks of several kinds, scallops, and great striated smooth muscles, the shells of which bear the finest mother of pearl.

Of the animals.

There is only one species of quadruped upon these islands; it is an animal something between a wolf and a fox. Land and water-fowls, however, are without number. The sea-lions and seals are the only amphibians. All the coasts abound with fish, most of them little known. The whales usually keep to the open sea but some of them occasionally become stranded in the bays where their carcasses are occasionally seen. Bones of an enormous size are to be found a good way up into the country, where the force of the waves could never have carried them, proving that either the level of the sea has fallen or the land has risen up.

The wolf-fox, (*loup-renard*) has been so-called because of its habit of digging a lair under-ground and because it has a tail more bushy than that of a wolf. It lives upon the downs along the seashore where it attacks wildfowl and makes paths from one bay to another, this with so much sagacity that they are always the shortest route from one bay and another. When we made our first landing on the island we were in no doubt that they were paths made by people who live here. It seems that for a part of the year this animal fasts for it is at a certain time very thin. Its size and form is that of a common

²² A freak or monstrosity of nature. -JFF

shepherd's dog, and it barks in the same manner, though not so loud. We frequently conjectured by what means it came to live in these islands.

The birds and fish have several predators to disturb their serenity. Those of the birds are the wolf-fox (discussed above), eagles, hawks, falcons, and owls; these creatures destroy many of their eggs and young.

The fish are even more persecuted, for they are preyed upon by many amphibious creatures and birds; some of which are always watching from the rocks whilst others constantly skim along the surface of the sea. This is not to mention the whales who, as is well known, feed solely upon fry, which they consume in prodigious numbers.

It would require a great deal of time and the eyes of a skilled naturalist to fully describe the animals which I mention below. I shall treat only those animals that are of some use to us and give only the essential details.

Web-footed birds.

Among the web-footed birds the swan is the largest. It differs only from those in Europe by its velvet black neck which makes an admirable contrast with the whiteness of the rest of its body. Its feet are flesh-coloured. This kind of swan is also to be found in Rio de la Plata and in the Straits of Magellan. There are four species of wild-geese here and they form one of our most important resources. The first only feeds on dry land and has been incorrectly referred to as a bustard.²³ Its long legs elevate it above the tall grass and its long neck enables it to have early warning of any danger. It walks and flies with great ease and does not have the disagreeable cackling cry which is peculiar to the rest of its kind. The plumage of the male is white, mixed with black and ash-colour on the wings. The female is yellow and its wings are adorned with varying colours. It generally lays six eggs. Its flesh is wholesome, nourishing, and palatable. There are few occasions when there is a scarcity of this goose for, in addition to those we breed in the island, wild ones come in great flocks with the east wind every autumn; probably from some uninhabited country.

Huntsmen can easily distinguish these new-comers for they have no fear of men. The other three species are not sought after to the same extent because they feed on fish and have an oily taste and their form is less elegant than that of the first sort. One of these goose species seldom takes to the air from the water and is very noisy. The colours of their feathers are chiefly white, black, yellow and ash-colour. All these species, including the swan, have soft down beneath their feathers which is white or grey and very thick.

Two kinds of ducks and two of teal frequent the ponds and streams. The former are but little different from those in our own climate. Some that we killed were quite black and others quite white. As to the teals, one of them has a blue bill and is the same size as the ducks; the other is much smaller. Some of them have flesh coloured feathers on their belly. These species are in great plenty and of an excellent taste.

Here are two kinds of small diver. One of them has a grey back and white belly. The feathers on their bellies are so silky, shining and close, that we imagined them to be the same birds from whose plumage fine muffs are made. This species is not abundant here.²⁴ The other type, which is more common, is quite brown but its belly feathers are somewhat paler than those on its back. Their eyes are like rubies with a circle of white feathers surrounding them. This feature emphasises their surprising liveliness, sets them more distinctly apart from other birds and has caused them to be named "diver with spectacles". They raise two young ones at a time and these are probably too tender to suffer the coldness of the water for, whilst they are only in their down their mother carries them on her back. These two species do not have webbed feet as do the other waterfowl. Their toes

²³ In the Northern parts of America there exists a wild goose which the French, when they had possession of Canada, called *Outarde* or Bustard. In English it is called the Canada-goose. Perhaps this is the same species. - JFF

²⁴ It is possible that the bird described is a grebe, rather than a diver. -JFF

are separate with a strong membrane on each side so that each toe resembles a leaf which is rounded towards the claw and has lines running from the toe to the circumference of the membrane. This, together with its green-colour and thinness, increases their resemblance to divers.

Two species of birds that were called saw-bills by our people, I do know why, differed only from each other in size and because occasionally some had brown bellies, whereas generally the colour, for that part in other birds of this kind, is white. The rest of the feathers are of a very dark bluish-black.

Because of their shape and the close texture and silkiness of their vent feathers we ranked them with the divers, however, on this point I cannot be certain that we were correct. They have a pointed bill and webbed feet with no separation between the toes, a feature which gives them a remarkable appearance. Their first toe is the longest of the three and the membrane which joins the toes diminishes to nothing at the third toe. Their feet are flesh-coloured. These birds consume an enormous number of fish. They perch upon the rocks and congregate in numerous families and it is in such places that they lay their eggs. Their flesh is very good to eat and we killed them two or three hundred at a time. The abundance of their eggs provided us another source for the supply our wants. They were so little afraid of our hunters that it was sufficient to go against them with no better arms than sticks. Their main enemy is a web-footed bird of prey which has a wingspan of almost seven feet and a long and strong bill which has two tubes made of the same substance as the bill itself that is hollow throughout. This is the bird which the Spaniards call *Quebrantabuesos*.²⁵

There is here a great quantity of *moves*²⁶, variously and prettily marked and also of gulls and terns; almost all of them grey and living in families that come skimming along the water to fall upon the fish with extraordinary quickness. These birds were of use to us only in that they showed us the proper season for catching pilchards. On catching these fish they hold them suspended in the air, only for a moment, and then, on regaining their perch regurgitated entire the fish which they had swallowed just moments before.

At other seasons they feed upon a little fish, called *gradeau*, and some other small fry. They lay their eggs, which are very wholesome food, in great number round the marshes on some pretty green plants that have the appearance of water lilies.

There are three distinct species of penguins; the first of these is remarkable on account of its shape and the beauty of its plumage. It does not, however, live in family groups; as do the second species. This bird is the same one that Lord Anson described during his voyage.

The penguins in the first group are fond of solitude and isolated places and they have a peculiarly noble and magnificent appearance; their gait is easy and they have a long neck when singing or crying, a longer and more elegant bill than those of the second group, their backs are of a more bluish cast and the belly is a dazzling white with a garland or necklace of a bright jonquil-yellow coming down from both sides of the head to their abdomen which forms a boundary between the blue and the white.

We had hoped to bring one of them over to Europe as they were easily tamed. They recognised and would follow the person who had been charged with feeding them. They ate the flesh, fish, and bread we gave them, but, we perceived this food to be insufficient for they absorbed their own fat and, accordingly, the birds grew thin and died.

The third sort of penguin lives in great flocks or families, like the second. They inhabit the same high cliffs, where we had found the saw-bills (*becs-scies*); here they lay their eggs. Their distinguishing characteristics are their small size, their dark yellow colour, a tuft of gold-yellow feathers (which are shorter than those of the Egret and which they raise when provoked) and lastly, some other feathers of the same colour which stand in the place of eye-brows. They were called hopping penguins by our people because they advanced chiefly by hopping and skipping. This species exhibits a greater degree of liveliness in its countenance than do the other two.

²⁵ Possibly the Southern Giant Petrel (*Macronectes giganteus*) -JFF

²⁶ So called by de B. - Species not identified. -JFF

Three species of petrels (*alcyons*) are resident but only appear infrequently; they do not forebode stormy weather as do those which are seen at sea. They belong, however, according to our sailors at least, the same species of bird.

The smallest of the three species has all the characters of being a petrel; though they may actually not be true members of this species. What is certain though is that they build their nests on shore where we have seen their young ones covered only with down but perfectly like their parents in all other respects. The second sort differs only from them in size, they being somewhat smaller than a pigeon. Both of these two species are black with some white feathers on the belly.

Birds not having webbed feet.

There are three species of eagle the largest has dirty white plumage while the plumage of the others is black; their feet are either yellow or white. They prey only upon the snipes and other small birds because they are not big enough, nor are their claws strong enough, to take larger birds. A number of sparrow hawks, falcons and some owls also prey upon small birds and animals. Their plumage is bright and varies greatly in colour.

The snipes are the same as our European ones; however, they do not fly erratically when they rise, and are thus easily shot. In the breeding season they soar up until they are lost from sight and then call when they locate their nest (these they form without precaution in the middle of the fields on spots where hardly any plants grow) before swooping down to it from the great height to which they had risen. During the breeding season they are very lean; the best time for eating them is in autumn. During the summertime we saw many curlews which in every way resemble our own. On the shores throughout the whole year we saw a bird resembling a curlew which we called a sea-magpie²⁷ on account of its black and white plumage. Its other characteristics are: a bill the colour of red coral and white feet. It almost never leaves the rocks which dry out at low water and where it lives upon little shrimps. It makes a whittling noise that is easily imitated, something that proved useful to our sportsmen but pernicious to the bird!

Egrets are quite common here; at first we took them to be common herons; not then knowing the value of their plumes. These birds begin fishing as night approaches; they have a harsh barking noise and so we often took them to be the wolf-foxes I have previously mentioned.

Every autumn two species of starling or thrush came to visit us; another of this genus remained on the islands throughout the year. We called it "the red bird"²⁸ Its belly is completely covered with feathers of a beautiful fiery red, especially during the winter when they can be collected in quantity and used for decorative purposes.

Of the two migratory species one is tawny coloured the under parts being of feathers flecked with black. The other has the colour of our common thrushes. I shall not give a detailed description of the great number of small birds, for they very much resemble those to be seen in the maritime provinces of France.

The amphibians.

The sea-lions and seals have already been referred to. These animals occupy the sea-shore and lodge, as I have already said, among the tall plants called gladioli (*glayeuls* or *glaiëuls*). They penetrate into the country, in innumerable herds, for a distance of a league where they enjoy the fresh herbs and bask in the sun.

It seems the sea-lion,²⁹ described in Lord Anson's Voyage, ought to be looked upon, on account of its snout, as a kind of marine elephant,³⁰ especially as he has no mane and is of large size, being

²⁷ Oyster catcher, *Hæmatopus ostralegus*. -JFF

²⁸ North American Robin, *Turdus migratorius*. -JFF

²⁹ *Otaria flavescens*. -JFF

³⁰ *Mirounga leonine*. -JFF

sometimes twenty-two feet long. There is also another much smaller species which does not have a snout but has a mane of hairs longer than those on the rest of its body; these, therefore, should be considered as being the true sea-lions.

The seal (*loup marin*)³¹ has neither mane nor snout and so each member of these three species is easy to distinguish from the others. None of these three creatures has an under-coat beneath its hair, such as is found in those caught in North America and Rio de la Plata. Both their oil and skins have already become a tradable commodity.

The fish.

We have not found a great number of fish species here. The sort that we caught most frequently we called mullet (*moug* or *mulet*), to which fish it bears some resemblance. Some of them were three feet long and our people dried them. The fish called *gradeau* is very common and are sometimes more than a foot long. The sardine only comes in at the beginning of winter. The mullets, being pursued by the seals, dig holes in the muddy ground on the banks of the streams and in them take shelter. We caught them without difficulty by taking off the peaty layer of mud covering their retreats. Besides these species a number of other very small fish were taken with a hook and line. Among these there was one which we called a transparent pike. Its head is shaped like that of our pike, the body is without scales and is perfectly diaphanous. There are likewise some conger eels amongst the rocks and a white porpoise, known as the mole (*la taupe*), which appears in the bays during the summer months.

If we had had sufficient time and enough men to spare to undertake fishing out at sea we should have found many other fish. Without a doubt there would some soles for we had a few which had become stranded on the sands.

We have caught only one species of fresh water fish; it is the size of a common trout, has no scales and is green in colour. It is, however, to be admitted that we have made but few researches in this manner of fishing for we did not have the time to spare and, in any case, other fish are in such abundance.

Crustaceans.

We have found here only three small sorts of crustaceans; the cray-fish (which is red, even before it is boiled and should be more properly called a prawn), a crab with blue feet pretty much resembling that called *tourelourou*,³² and a minute species of shrimp. These three crustaceans, the muscles and various other shell fish were only picked up for curiosity's sake because they do not taste as good as those found in France. This land appears to be entirely lacking in oysters.

Lastly, by way of forming a comparison with a cultivated island in Europe, I shall quote what Pufendorf³³ says of Ireland, it being situated in nearly the same latitude in the northern hemisphere as the Falklands are in the southern one.

"This island is pleasant on account of the healthiness and serenity of the air and because heat and cold are never excessive here. The land is well endowed with lakes and rivers and there exist great plains covered with excellent pasture. It has no venomous creatures; its lakes and rivers abound with fish...."

See Pufendorf's Universal History.³⁴

³¹ *Aretocephalus australis*. -JFF

³² Not identified. -JFF

³³ Baron Samuel von Pufendorf b. 1632. -JFF

³⁴ For an up to date account of the flora and fauna of the Falkland Islands visit --- www.falklands.net

CHAPTER V

Voyage from the Falkland Islands to Rio de Janeiro.

The Boudeuse & the Etoile meet up.

Hostilities between the Portuguese & the Spanish.

Details concerning the income the king of Portugal derives from Rio de Janeiro.

June 1767.

Departure from the Falklands for Rio de Janeiro.

I waited in vain at the Falklands for the Etoile to arrive and the months of March and April passed without the appearance of our store-ship. It would not be possible for my frigate to cross the Pacific alone for the capacity of our hold is too little to carry sufficient victuals for the crew. As a consequence, I continued to wait for the store-ship during the entire month of May at the end of which time there remained victuals for only two months. I sailed from the Falklands on the 2nd of June. Our destination was Rio de Janeiro where I had instructed Mr de la Giraudais, the Etoile's commander, we were to meet if circumstances prevented him from reaching our Falkland Islands rendezvous.

During this passage we had good weather and on the afternoon of the 20th of June we sighted the mountains of Brazil then, on the 21st, we identified the entrance to Rio de Janeiro. While passing along this coast we saw a number of vessels engaged in fishing. I hoisted a furled Portuguese ensign and fired a cannon; upon which signal one of these vessels came alongside from which we took on a pilot to bring us into the roads. He guided us along the coast at a distance of about half a league from the islands with which it is bordered. We made soundings during the entire passage. This coast is quite elevated and there are tree-covered mountains with steep escarpments altogether giving the scene a most contrasting aspect.

Entrance into Rio de Janeiro.

By half past five in the afternoon we were close to Fort St. Cross; they hailed us and a Portuguese officer came aboard who asked us why we had come there. I sent the Chevalier de Bournand ashore with him to inform the Count d'Acunha, the Viceroy of Brazil, what our business was and to discuss with him the formalities for the salute. At half past seven we anchored within the roads in 8 fathom on a bottom of black mud.

The Chevalier de Bournand returned soon afterwards and informed me what had been discussed concerning the salute. The Count d'Acunha had informed him:

"When a person meets another in the street, he doffs his hat. He does not wait to be assured that this politeness will be returned."

His meaning being, that if we saluted the place we would have to wait and see whether or not our salute would be returned.

This response being no response at all, I did not salute.

Rendezvous with the Etoile.

I learned at this same time, by means of a small boat sent by Mr de la Giroudais, that the Etoile was in the port and that her departure from Rochefort, which had been scheduled for the end of December,

had, of necessity, been delayed until the beginning of February. He also informed me that after three months at sea a leak and the deteriorated state of her rigging had forced her into Montevideo. Here he had been informed by the Spanish frigates returning from the Falklands the nature of my instructions. He had then straightway made sail for Rio de Janeiro where he had been at anchor 6 days. Having made contact with the *Etoile* meant we were able to continue our mission. Although the *Etoile* was carrying, in the form of salted meat and beverages, enough to sustain us for thirteen months she had barely enough bread and vegetables for 50 days. The shortage of these indispensable commodities would force me to return to the river Plate in order to obtain them unless we were able to obtain: biscuit, wheat and flour here in Rio.

A Spanish vessel encounters difficulties with the Portuguese.

In the port two ships that were of interest to us were moored. One of them was French and the other Spanish. The first, named *The Morning Star* (*l'Etoile du matin*), was a king's ship bound for India. She was too small to attempt rounding The Cape of Good Hope in winter and was waiting here until a time of year when the weather would be kinder.

The Spaniard was a 74 gun Man-of-War named the *Diligent* commanded by Don Francisco de Medina. They had come from the river Plate with a cargo of hides and coinage (*piasters*), however, a serious leak below the waterline had forced them to put in here to effect repairs before making the crossing to Europe.

Help we provided.

The Spaniards had been refused any assistance during the eight months they had been here and had suffered every obstacle the Viceroy could dream up to prevent them from completing the necessary recaulking. On the evening we arrived Don Francisco sent me a request for the services of our shipwrights and caulkers and on the following day I sent over to him all our men from both ships.

The Viceroy pays a visit to the frigate.

On the 22nd a party of us called upon the Viceroy and on the 25th he made a return visit. As he disembarked, I made him a 19 gun salute which was returned by the shore battery. During his visit he offered us every assistance at his disposal. He even granted my request to purchase a small schooner which would be of great assistance to us during our expedition. He even added that if there had been a king's schooner available he would have offered it to us. He assured us that he had ordered a detailed investigation into the murder of the *Etoile's* chaplain, a crime that had occurred right under the palace windows on the day before our arrival, and that the crime would be punished with the greatest severity possible under the law. He promised, but promises here are like pie crusts, made only to be broken.

The viceroy's civilities towards us continued for several days. He even told us of his intention to give us dinner (*petits supers*), by the water-side under "bowers of jasmine and orange-trees." He ordered a box at the opera prepared for us and in a quite nicely decorated theatre we saw the most famous works of Metastasio ³⁵ presented by a troupe of mulattoes and we listened to the divine compositions of the great Italian masters executed by an orchestra under the direction of a humpbacked priest dressed in his canonicals!

The preferential treatment we enjoyed was a matter of great astonishment to the Spaniards and even to the local people who told us that their governor's generosity would not last very long. Indeed, whether our connections with the Spaniards and the assistance we had given them had displeased

³⁵ A prolific 17c. Italian composer, librettist and writer of texts intended to be set to church music. -JFF

him, or, whether he could no longer feign conduct so diametrically opposite to his true natural temper, he soon became, in his manner toward us, what he had ever been to everybody else.

Hostility of the Portuguese toward the Spanish.

On the 28th of June we heard that the Portuguese had made a surprise attack on the Spaniards at *Rio-Grande*. They had driven the Spaniards from a station they occupied on the left shore of the river and had detained a Spanish ship moored at St. Catherine's Island. The Portuguese rapidly fitted out the 64 gun *San Sebastiano*, a vessel that had been built here, and a 40 gun frigate called *la nuestra Señora da gracia*. This ship, it was said, was preparing to escort a convoy of troops and ammunition to Rio-Grande and the colony of Santo Sacramento.

1767. July.

These hostilities and the preparations being made gave us reason to suspect that the viceroy intended to detain the *Diligent* which at this time was careening on the island *de las Cobras*. Consequently, we accelerated her refit as much as we were able. Indeed, she was ready for sea by the last day of June and had begun embarking her consignment of hides. However, on the 6th of July, when she attempted to take her cannon on board (during the repair they had been deposited on the Grass-Snake Island (*l'île Couleuvres*)), the viceroy forbade their delivery and declared that the ship was under arrest pending his receiving orders from the court apropos the hostilities committed at Rio-Grande. Don Medina did everything possible to dissuade him but count *d'Acunha* would not even accept the Spanish commander's letter that one of his ship's officers attempted to deliver.

The Viceroy's malicious behaviour toward us.

We were soon destined to share in the discomfiture of our allies. When, having negotiated the purchase of a snow ³⁶ (*senault*), His Excellency, who had previously given his consent, forbade the owner delivering the vessel to me. He also prevented us from obtaining the timber which we were in need of from the Royal dockyard and for which the Portuguese had already been contracted to provide. Additionally, he refused to allow me to lodge with my officers, who while essential repairs to the frigate were in progress, were accommodated in a house near the town under an agreement we had made with the owner. It was the same house that Commodore Byron had used during his stay at this port in 1765.

I sought to take up the issues of his refusal to permit the sale of the snow and the timber with him; however, the moment I began to speak he flew into a rage and ordered me to leave. Irritated no doubt because in spite of his display of anger I and two of my officers remained in our chairs; he summoned the guards. The guards however, being wiser men than he, did not appear; we then retired without displaying the slightest sign of being ruffled. Moments after our departure he ordered the palace guard doubled and increased the patrols with orders to arrest any Frenchmen abroad after sunset. He sent orders to the captain of the four gun French vessel to move his mooring to a position below Fort Villagahon. The following day the Boudeuse's boats towed him to that location.

We decide to leave Rio de Janeiro because of their attitude.

From that time forward I thought seriously about leaving Rio de Janeiro especially as the local people, with whom we had had good relations, would become victims to the Viceroy's displeasure. Two Portuguese officers had already been punished for their honest dealing with us. One of them was cast into one of the citadel's dungeons, the other exiled to Santa, a small village between St. Catherine's

³⁶ A snow (*senault*) is a ship similar to a brig.

and Rio Grande. We watered ship with all possible haste and I embarked from the Etoile those stores and beverages that were essential to us. It had become necessary for our tops to be extended. The captain of the Spanish ship provided us with the timber, the dockyard having refused to supply it, for this purpose. I also managed to, illegally, obtain some board timber of which we were in dire need. Finally, on the 12th, everything was ready and I dispatched an officer to inform the Viceroy that we intended to sail with the next favourable wind. I advised Mr d'Etcheveri, the captain of The Morning Star, not to remain in Rio de Janeiro a moment longer than was absolutely necessary. I told him his time would be better employed if he was to sail to Tristan da Cunha, rather than wait here for conditions favourable for rounding the Cape of Good Hope.

I gave him the benefit of my experience of those islands and informed him that he would find, at Tristan da Cunha, water, timber and fish in abundance. I later learned that he had followed my recommendation.

During our stay at Rio de Janeiro we enjoyed the sort of spring of which poets talk. The inhabitants there treated with us honestly and were at pains to make us aware of the disgust they felt at the bad treatment we received from the Viceroy's hands. We greatly regretted that we were unable to stay longer amongst them.

So many other navigators have described Brazil and its capital that I am unable to add anything that would not be tiring repetition. The fact that France had, at one time, captured Rio de Janeiro is well known. I will therefore, limit myself to describing in some detail the region's riches which are exported from this town and the revenues received therefrom and which accrue to the king of Portugal. But, before I begin I will relate the findings of Mr Commerçon in this port.

He is, as I mentioned earlier, a learned naturalist who had been appointed to the Etoile for the expedition. He assured me that this country possessed the richest flora and fauna of any land he had ever visited and that he had found there many botanical treasures.

Details concerning the wealth of Rio de Janeiro.

Rio-Janeiro is the trading hub and principal exporter for the rich produce of Brazil. The mines, which are called *générales*, are the closest to the city and are about seventy-five leagues distant. They annually bring in revenues to the king as he is entitled to one fifth part of the production which is, at least, 112 *arobas* ³⁷ of gold; in 1762 they brought in 119. These gold mines, which are under the control of the Superintendent of Mines, are in the regions of *Rio das Mortes*, *Sahara*, and *Sero-frio*. This last location, in addition to gold, produces all the diamonds that come from the Brazils. They are found in the bed of a river that has been diverted into workings where the diamonds, topazes, chrysolites and other less precious stones are separated from the pebbles among which they are intermingled.

Regulations for mine workings.

Diamond mines.

All these jewels, with the exception of the diamonds, belong to the agency appointed to work the mine. The agents are, by law, required to give an exact account of the diamonds found and to hand them over to the officer appointed by the king to receive them. This officer, immediately upon receipt, encloses them in an iron-bound chest secured with three locks. The officer retains one key, the Viceroy another and the *Provador de l'Hazienda Réale* the third. This chest, with the three keys, is then enclosed within another chest upon which the three persons, above mentioned, affix their seals. The Viceroy is not empowered to reopen this chest once it has been sealed but is obliged to enclose the whole within another strong-box, which, after fixing his seal upon the lock, he sends to Lisbon.

³⁷ A unit of weight, in Portugal equivalent to 14.7 kg. -JFF

Once there, the box is opened in the presence of the king who chooses the stones he wants to keep; he pays the mine owners for them at the rate detailed in a schedule already agreed.

The mine owners pay his Majesty one Spanish piaster for every day worked for each slave employed in the diamond mines. Sometime the number of these slaves can amount to as many as 800.

Of all the forms of contraband that of diamond smuggling is the most severely punished.

If the smuggler is poor he is executed. If he is rich enough to pay what the law demands, in addition to the confiscation of the diamonds, he must pay a fine equivalent to twice their value, be imprisoned for a year and then sent into lifelong exile on the African coast. Despite the severity of the consequences diamond smuggling, including those of those of the highest value, remains commonplace on account of their small size and ease with which they can be concealed.

Gold mines.

None of the gold that is extracted can be sent to Rio de Janeiro unless it first passes through one of the government establishments located in every district; here the portion that is due to the crown is deducted. The remainder is remitted to the mine owners after having been cast into ingots, each of them stamped with its weight, its number and the insignia of the king. The alloy of all the gold passing through these establishments is tested by a person particularly appointed and each ingot stamped to show its purity. This is done so that, at a later date, when being converted into coinage at the mints, the appropriate percentage of gold is easy to calculate.

These privately owned ingots are registered at the office of *la Praybuna*, 30 leagues distant from Rio de Janeiro. This agency is operated by a captain and a lieutenant with a staff of 50 workers. Here is deducted a tax amounting to the value of one fifth part plus a levy of 1½ reals for every man, head of cattle, goat or sheep and for every other beast of burden. One half of this tax goes to the king, the other half is used to pay each person in the local military detachment a wage in proportion to his rank.

As it is impossible to return to the mines without passing this establishment everyone is stopped and thoroughly searched. The owners are obliged to take the gold, in the form of ingots, to the Rio de Janeiro mint where they exchange it for its value in gold coinage, usually half-doubloons, each the equivalent of 8 Spanish piasters. Upon each half-doubloon the king takes one piaster for the alloying and minting. The Rio de Janeiro mint is one of the finest in existence and is equipped with all the equipment necessary for the expeditious production of coins. The mint is busiest at those times when the gold comes in from the mines or when the fleet arrives from Portugal at which time coins are struck with quite amazing speed. The arrival of the fleets, in particular the ones coming from Lisbon, greatly stimulates business in Rio de Janeiro.

The fleet from Oporto transports mainly wines, brandy, vinegars, foodstuffs and coarse cloth which is manufactured there or in the surrounding region. Immediately upon the fleet's arrival all the imported merchandise is taken into the customs-house where a royal duty of 10% is imposed.

It has been observed that, because of these restrictions, communication between the colony of St. Sacramento and Buenos Aires is nowadays considerably curtailed; a great deal of the valuable goods which are sent from Rio de Janeiro to that colony end up being smuggled via Buenos Aires into Chile and Peru.

To the Portuguese smugglers this contraband trade is worth 1,500.000 piasters a year. One strange circumstance of this situation is that, because none of the mines in Brazil produce silver, all the silver the Portuguese require is obtained via this illegal trade.

The slave trade here is big business and it is impossible to estimate what would be their loss if this particular branch of smuggling were to be suppressed. On its own account it employs 30 vessels in the coastal-trade between Brazil and the River Plate.

The king's revenues accruing from Rio de Janeiro.

Besides the longstanding 10% tax, paid via the royal customs office, there is another tax of 2½% termed a "donation". This tax originated following the disaster at Lisbon in 1755.³⁸ This tax is extracted immediately goods leave the customs-house. It can be suspended for 6 months provided the goods remain impounded and then only if valid notification of this intention is registered.

The mines at St Paulo and Parnagua in an average year pay the king 4 arrobas, which is his entitlement of one fifth. Mines in more distant locations, Pracaton and Quiaba for example, come under the jurisdiction of the local government area of Matagrosso and their fifth is not sent to Rio de Janeiro, but, that from the mines at Goyas is. In the Matagrosso administrative area there are also diamond mines, however, exploitation of them is prohibited.

The entire annual expenditure of the king of Portugal in the Rio de Janeiro area comprises: payment of troops and civil servants, maintenance of mines, upkeep of public buildings and careening of ships. This amounts to a total of approximately 600,000 piasters. This does not include the construction of first-rate ships-of-war and frigates, activities which have now been established here.

Recapitulation of the components and average value, in Spanish piasters, of the king's various revenues.

150 arrobas gold all the fifths, in an average year, amounts to	1,125,0 00
The duty on diamonds.	240,000
The duty on the coinage.	400,000
Ten per cent, of the custom-house	350,000
Two and a half per cent "donations".	87,000
Poll tax, sale of employs, offices, and other mines revenues.	225,000
Duty on Negroes.	110,000
Duty on whale-oil, salt, soap and the tenth on the victuals of the country.	130,000

Total in dollars or piasters. 2,667,000

From whence if the expenses above mentioned are deducted, it will appear that the king of Portugal's revenues from Rio Janeiro, amount to upwards of ten millions of our money.³⁹

³⁸ On 1st of November 1755 an earthquake occurred 200km off Portugal. The resulting tsunami almost destroyed Lisbon, there was great loss of life. -JFF

³⁹ French livres. -JFF

CHAPTER VI

Departure from Rio de Janeiro; second voyage to Montevideo; damage to the Etoile.

July 1767.

Leaving Rio de Janeiro.

ON the 14th of July we sailed from Rio de Janeiro but, for want of wind, we were obliged to come to an anchor in the roadstead. We sailed again on the 15th and two days later, the frigate being a much better sailer than the Etoile, I was obliged to unrig my top-gallant masts because our main-masts required so much careful management. The winds were variable but fresh and the sea very high. During the night of the 19th and 20th we lost our main-top-sail being carried away on its clue-lines.

Eclipse of the sun.

On the 25th there was an eclipse of the sun visible at our position; for this reason I had taken M. Verron aboard my ship. He is a young astronomer who came from France in the Etoile with the objective, during the course of the voyage, to evaluate some methods for determining longitude at sea.

According to our estimation of the ship's position the moment of immersion, as calculated by the astronomer, would be on the 25th at nineteen minutes past four o'clock in the evening. At six minutes past four o'clock a cloud prevented our seeing the sun and when we got sight of it again, at thirty-one minutes past four, about an inch and a half was already eclipsed. Clouds passed successively over the sun's disk permitting us to see it only for very short intervals. Consequently, we were unable to observe any of the phases of the eclipse and so could not calculate our longitude from it. Sunset at our location occurred before the moment of apparent conjunction but we estimated the duration of immersion to have been 4 hours and 23 minutes.

Entrance into the River Plate.

On the 26th we began to obtain soundings and on the morning of the 28th we sighted the Castilles. This part of the coast is of medium elevation and is visible at a distance of 12 leagues. We believed we had identified the entrance to the bay which is an anchorage where the Spaniards have a fort and where I had been informed the holding ground is very poor. On the 29th we entered the River Plate and saw the Maldonados but we made little progress either this day or the one following. For almost the entire night of the 30th and 31st we were becalmed and took soundings constantly. The current set to the north-westward and we remained for some time quite close to Lobos Island. By 1½ hours after midnight we obtained a sounding of 33 fathoms; I thought I was very near to the isle and gave the signal to anchor. At half past three we weighed and saw the Lobos Island about a league and a half to the north-east; the wind was south to south-east, light at first then freshening towards sunrise. We anchored in Montevideo Bay in the afternoon of the 31st.

We had lost a lot of time due to the slowness of the Etoile and despite us having the advantage of being of being a faster sailer than the store-ship we had been constrained to stay with her because from the time we left Rio de Janeiro she was making four inches of water every hour; after being at sea few days her leak had increased to the extent that she took in seven inches in that same space of time. This severely limited the area of canvas she could spread.

Second call at Montevideo.

We had only just moored when an officer came aboard who had been sent by the governor of Montevideo to compliment us on our arrival. He informed us that orders had been received from Spain to arrest all Jesuits and to seize their property. The same ship which brought these orders had also brought four Company priests to take over the missions.

New Information that we become aware of.

We were told that these orders had already been acted upon in all the main religious establishments without causing any trouble or resistance. In fact quite the contrary, these holy men had borne their fall from grace with wisdom and resignation.

We were to spend some considerable time at Buenos Aires during which I was honoured to gain the confidence of the Governor General Don Francisco Bukarely; consequently, I have intimate knowledge of the affair of the Jesuits; an event of great significance into which I will go, in some detail, a little later.

August 1767.

We were obliged to remain in Buenos Aires until after the equinox; we took up lodgings in Montevideo where we housed our workmen and set up an hospital.

These essential preparations having been completed by the 11th of August I went to Buenos Aires to expedite the acquisition of the supplies we were in need of. They were to be charged to the account of the Commissariat General of the king of Spain at the same rate as goods supplied to his Catholic Majesty's own services.

Although I had already sent off the dispatches of Dom Francisco de Medina by an express, I wanted to obtain from Mr de Bukarely a report of what had been going on in Rio de Janeiro.

I discovered he [de Bukarely] had limited himself to action no more serious than sending a report on the hostile acts committed by the Viceroy of Brazil to Europe; and he had, wisely, refrained from taking any reprisals. It would have been very easy for him to seize the colony at St. Sacrament because the convoy of food and ammunition that was being prepared when we left Rio de Janeiro did not arrive until November.

The Governor General gave us a great deal of assistance in obtaining the stores we needed.

At the end of August two schooners laden with our biscuit and flour had sailed for Montevideo and I then set out to go to there myself in order to celebrate the feast of St. Louis. The chevalier Bouchage, a second lieutenant, had remained in Buenos Aires to supervise the embarkation of the rest our victuals and to take care of any business concerning us that might arise there prior to our departure. I had planned to depart in September, however, that did not take into account an accident that was to prolong our stay for six weeks beyond that date. During a south-easterly gale the Saint Fernand, a register ship⁴⁰ moored close to the Etoile, had dragged her anchors and was swept down until she collided with our store-ship.

Damage suffered by the Etoile.

The first shock broke her bowsprit off level with the deck. Afterwards the knee and rails of her head were carried away. We were fortunate that, in spite of the bad weather and the obscurity of the night, the two ships separated before any further damage occurred.

September 1767.

⁴⁰ A register ship is one, having been registered in Cadiz, is licenced to trade in the East-Indies. -JFF

This collision considerably worsened the leak that had troubled the Etoile from the beginning of the voyage. It had now become imperative that she be heaved down, (*virer de quille*)⁴¹ to repair the leak that appeared to be low down and towards the forward part of her hull. This operation could not be carried out in Montevideo where, in any case, timber was not available for the repair of her bowsprit. Consequently, I wrote to the *Chevalier du Bouchage* instructing him to bring our predicament to the notice of the Marquis de Bukarely and to ask his consent that she be permitted to come up the river to the *Encenada de Baragan*. I asked him also to obtain the timber and other materials that would be required. The Governor General consented to these requests and on the 7th of September, despite being unable to find a pilot, I went aboard the Etoile with the shipwrights and caulkers from the Boudeuse with the intention of undertaking, the next day, a passage we had been informed was both long and difficult.

Two register ships, the Saint Fernand and the Carmen, they having obtained a pratique⁴², were to sail the same day from Montevideo to the *Encenada*. I was counting on being able to follow them.

However, there was a pilot aboard the Fernand named Philippe who decided to anchor during the night of the 7th and 8th with the sole objective of causing us embarrassment. This action also left his sister ship in the same predicament. We set off first thing on the morning of the 8th with our ships boats going ahead of us. The Carmen delayed her departure pending the arrival of a schooner which, it had been arranged, would lead the way.

In the evening we met up with the Saint Fernand and overtook her then, on the afternoon of the 10th, we anchored in the roads of *Encenada*. Philippe, being as bad a man as he was a pilot, had sought to impede us during the entire duration of the passage.

We found there to be a 26 gun frigate named the Venus and several merchantmen anchored in the roads. They were all preparing for imminent departure for Europe. In the anchorage were also the *la Smeralda* and the *la Liebe* making ready to embark a cargo of various munitions destined for the Falkland Islands. From which place they had been detailed to enter the Pacific Ocean (Southern Sea) and then to embark the Jesuits of Chile and Peru. Also here was a Xantec ⁴³ (Chambekin) named *l'Andelous*; she had arrived from Ferrol at the end of July. She had crossed the ocean in company of another Chambekin named *l'Aventura* which had been lost on the English Bank, fortunately, her entire crew had been rescued. The *Andelous* was making preparations to transport missionaries and other personnel destined to assist the natives living in Tierra del Fuego. The Catholic king wanted to show them his gratitude for the aid they had given the crew of a Spanish vessel, *la Concepcion*, which had perished on their coastline in 1765.

The Etoile is refitted.

I went down-river to Baragan to where the Chevalier Bouchage had already had shipped some of the timber we needed. He had obtained this timber, with great difficulty and expense, both from the royal arsenal at Buenos Aires and from private salvage merchants who obtained their material out of ships wrecked in the river. At Baragan there were no resources to be found, only a multitude of difficulties of every possible complexion; everything seemed designed to cause as us much delay as possible. *La Encenda de Baragan* is, in reality, nothing more than a bay about a quarter of a league wide forming the opening of a small river with but poor anchoring ground. There is only sufficient depth of water in the narrow central channel, which silts up daily, for ships with a maximum draught of 12 feet. Everywhere else in the bay there is no more than 6 inches of water at low tide.

The tides in the River Plate are very irregular; sometimes high or low lasts for 8 days at a time, depending on how the wind blows. The landing of boats here is fraught with great difficulty. Into the

⁴¹ To, heave down (dry out a ship resting on its keel) to examine/repair the hull. -JFF

⁴² Permission to enter a port on the assurance of the ship's captain that the vessel is free of contagious disease. -JFF

⁴³ A small coastal trading vessel, common in the Mediterranean having lateen sails. -JFF

bargain there are no workshops on-shore, only a few hovels which are scattered about in a disorderly manner that are constructed of hides and thatched with reed.

The surrounding lands are uncultivated, inhabited only by men who can hardly be bothered to make the effort necessary to provide for their own subsistence. Ships with too great a draught to enter into this cove moor 1½ leagues further to the West where, although they are exposed to all the winds, there is very good holding ground. Although Lara Point is a most inconvenient place ships find it possible to overwinter there.

1767. October.

I left Mr Giraudais at Lara Point charged with the supervision of the Etoile's repairs while I went to Buenos Aires. From there I sent him down a large schooner to be used as an accommodation ship when he went into *La Encenda de Baragan*. Prior to that relocation, however, it would be necessary for him to discharge some of her onboard equipment. To this end Mr de Bukarely had given permission for it to be stored aboard *la Smerelda* and *la Liebe*. By the 8th of October the Etoile was in a state to enter into the port and we became aware that her repairs would not take as long as we had previously thought. Happily, hardly had she begin to lighten, than her leak diminished. After removing part of her sheathing we saw that some of her seams, over an area encompassing 4½ feet, fore and aft, by 8 feet in depth, were completely without oakum. In addition we found two auger holes that did not have bolts fitted.

All these defects were quickly rectified; new railings were fitted at the head, a new bowsprit made and installed. Additionally, the store-ship was re-caulked from stem to stern and on the 21st she returned to Lara Point and re-embarked the materials previously stored aboard the Spanish frigates and also the biscuit and other provisions I had sent there.

Several vessels sail for Europe, others arrive.

At the end of September the Venus and four other vessels sailed for Cadiz with cargoes of hides. They had on board 250 Jesuits and the French colonists from the Falkland Islands with the exception of seven families for whom there was not sufficient accommodation. Being thus compelled to wait for another ship they had been brought into Buenos Aires by the Marquis of Bukarely where he made provision for their accommodation and sustenance.

We learned at this time of the arrival of the Diamond, a register ship bound for Buenos Aires, and of another vessel, also a register ship, the Saint Michael, en route for Lima. The situation aboard this last ship was sad indeed. After battling against contrary winds for 45 days off Cape Horn with 39 of her crew already dead and the remainder stricken with the scurvy, she was compelled to make for this river because a rogue wave had carried away her rudder. Eventually, seven months after leaving Cadiz, she entered into the harbour at Maldonades. On board her only three of the crew and several officers remained in a fit state to carry out their work. At the request of the Spanish we sent an officer and a crew to take this ship into Montevideo.

On the 5th of October the Spanish frigate the Eagle arrived having sailed from Ferrol in the month of March. She had called in at Saint Catherine's Island where the Portuguese had impounded her for the same reasons that they had arrested the Diligent at Rio de Janeiro.

CHAPTER VII

Details of the missions in Paraguay & the expulsion of the Jesuits from this province.

While we were hastening our preparations for sailing from the River Plate the Marquis of Bukarely was making his own preparations to enter the Uruguay region. In all other regions of his department the Jesuits had already been arrested and the Governor General wanted to personally carry out his catholic Majesty's orders relating to the missions themselves. It was his responsibility to ensure the measures taken would ensure the people's compliance with the changes but would not plunge them back into a state of barbarism. However, before I relate in detail what I observed of the catastrophe initiated by this unconventional government, I ought to say something of its origins, its progress and its nature. I will tell it: *sine irâ & studio quorum causas procul habeo.* ⁴⁴

Date of the establishment of the missions.

It was in the year 1580 that the Jesuits were first allowed to come into these fertile regions. Here they founded, subsequent to the reign of Phillip III, their celebrated missions, known in Europe and even more widely in America, by the names Paraguay and Uruguay. These being the names of the rivers upon whose banks the missions were situated. These places had previously been inhabited by peoples of diverse origins.

In the beginning the missions were few and not firmly established. Slowly but surely, however, they increased until today they number thirty-seven, that is to say, twenty-nine on the right bank and eight on the left bank. Each of these missions is directed by two Jesuits who wear the habit of their order. Two objectives have inspired the kings of Spain to send the Jesuits here, neither of them exclusive of the other; religion and self-interest. They wanted the Indians converted to Catholicism believing that, once civilised, these savages would be more tractable making this vast and rich country easier to administer.

It was their intention to open the region up, making it a new source of prosperity for Spain and, at the same time, to increase the numbers of believers in the one true God.

The Jesuits insisted, as a precondition to assuming this role and to ensure it's success, they must be independent of the provincial governors and any other Spanish authority established in the country.

Conditions stipulated between the Spanish court and the Jesuits.

Their motive in stipulating this condition was that they believed that if the natives came into contact with European vices the fervour of converts would be diminished or might even make Christianity anathema to them. They believed also that Spaniards of rank would impose upon the Indians so heavy a burden that they would never accept its conditions. The Spanish crown accepted this reasoning and ruled that the missionaries were independent of the authority of the governors. They provided funds amounting to sixty-thousand piasters each year for the agricultural development of the land with the proviso that, as the people became civilised and as the land was brought into productivity, each Indian between the ages of 18 and 60 years would pay the king one piaster per annum. The king also demanded that the missionaries teach the Indians to speak Spanish; a condition that, however, seems to have been largely ignored.

⁴⁴ Without anger or favour, remote as am I from the matter. -JFF

Zeal and success of the missions.

The Jesuits entered into their calling with the courage of martyrs and with the true patience of saints. These qualities were absolutely essential if the natives, who were fiercely independent and strongly attached to their shiftless way of life, were to be attracted and persuaded to accept obedience and the notion of regular employment.

The obstacles they encountered were without number; new difficulties arose with every endeavour they undertook. Their enthusiasm, however, triumphed over every impediment and in the fullness of time their gentleness brought these fierce inhabitants of the forest to kneel at their feet. They encouraged them to settle in association one with the other; they gave them laws; they introduced them to crafts both useful and pleasant to engage in. Ultimately they created from a barbaric nation having neither morality nor religion a gentle and civilised people who were obedient to the letter of Christian rites and ceremony.

The Indians were seduced into voluntary obedience by these men, whom they saw were prepared to give up almost everything and commit themselves totally to improving the condition of the simple people in their charge. So overawed were they by these saintly apostles that when they saw the king of Spain in their minds they imagined him dressed in the habit of Saint Ignatius.

Revolt of the Indians against the Spanish.

Nevertheless, in the year 1757 a brief revolt against Spanish authority arose. The Spanish and Portuguese authorities had recently agreed that the River Uruguay would henceforth form the border between the colonies of the two countries. Madrid's object in this being to reduce the volume of smuggling that, as I have said before, was rife in the region. A consequence of this rearrangement was an exchange of Indian people, now living on the West bank of the river, with others from the colony of the Holy Sacrament. Those affected by this were to be financially compensated for the costs involved in the relocation.

Cause of their discontent.

These people had, however, become completely settled in their homes and were utterly opposed to leaving the land they had by this time brought to full agricultural production. Relocation would mean them having to start from scratch all over again and so they took up arms against the measure. For some time the Indians had been permitted to bear arms in order to protect themselves against the Paulists, brigands from Brazil, who often made raids on their villages. Brazil had become a republic towards the end of the sixteenth century.

The revolt broke out without the compliance or support of the Jesuits. It has been even been claimed that these priests were compelled to remain in the villages in order to continue their religious duties.

They take up arms and are beaten.

The Governor General of the province of La Plata, Dom Joseph Andonaighi set out to confront the rebels he was followed by Dom Joachim de Viana, the Governor of Montevideo. These forces defeated the Indians in a battle during which more than 2,000 of them were slaughtered. Dom Joachim, on seeing the terror that this first defeat caused them, then set out with a force of 600 men to subdue the entire country. Indeed, having attacked the first group of Indians he encountered and capturing them without resistance, the remainder surrendered to Spanish authority.

While these events were taking place the court in Spain recalled Dom Joseph Andonaighi. Dom Pedro Cevallos arrived in Buenos Aires as his replacement. At the same time Viana received an order to abandon the missions and to recall his troops. The planned exchange of native peoples by the two

crowns had, by this time, been given up. The Portuguese troops who had also marched against the Indians retired at the same time as the Spanish.

Peace is restored.

It was at this same time that rumours became widespread in Europe that a surrogate king, named Nicolas, had been elected by the Indians.

The Indians seem to have become disgusted with the Jesuit administration.

Dom Joachim de Viana told me that when he received the order to leave the missions a large group of Indians, who had become discontented with the lives they were leading, wanted to accompany him. He was against this but was unable to prevent seven families from following him. He permitted them to establish a new commune in the Maldonades region where today they provide a fine example of industriousness and hard work. What he told me concerning the discontent of the Indians came to me as something of a surprise when I heard it. How could it be reconciled with all that I had read about the manner in which they were governed?

I would have held up the manner in which these missions were managed as a model to any administration seeking to improve the happiness and sagacity of its human subjects.

Government of the missions put into context.

Without a doubt, when one considers this situation from an outsider's point of view, the general behaviour of this extraordinary government, based as it was only on spirituality and the constraint of its subjects by nothing more temporal than the chains of persuasion; there has never been known to humanity a more noble institution.

It is a society resident in a fertile land enjoying a most agreeable climate. All its members work hard but not solely for their own account; the fruits of co-operative agricultural production are faithfully delivered to the community distribution places from where everybody receives what he needs to supply his table, to clothe himself and to maintain his household. The man in the vigour of his prime feeds the new-born infant, then, time having diminished his ability; he receives from his neighbours those same services of which he had previously been the benefactor.

The private residences are comfortable and clean, the public buildings are beautiful, and rites of worship are scrupulously adhered to. This contented people know no distinction of rank or condition but are sheltered from both the extremes of wealth and poverty.

Such is how things appear on the surface, how things look at first glance. It is, however, an illusion created by an unfamiliar perspective. In matters of actual government an immense gulf separates the theory from the practice. Of this I have become convinced by the facts that will follow and which have been related to me, unanimously, by a hundred eye-witnesses; their evidence I will now relate.

Internal workings of the administration.

The extent of the country in which the missions are located is about 200 leagues from north to south and perhaps 150 from east to west; it is inhabited by a population of almost 300,000 souls. In this region there are forests where many species of timber are produced. The acreage of grazing land is enormous and supports at least 2,000,000 head of cattle. There are fair rivers serving the interior, both agriculturally and as a conduit for commerce.

Imagine that we see a local before us; how does he live? The country, as we have said, is divided into parishes each being regulated by two Jesuits, one of them is a priest the other his curate. The outlay for the support of the people of these communities is very small because the Indians are fed, clothed and housed by the labour of their own hands. The greatest cost is the construction and upkeep of the

churches which are often magnificently ornamented. Such crop surpluses as arise and all the livestock are the property of the Jesuits. They, for their part, import from Europe the tools needed to pursue various trades: glassware, knives, sewing-needles, religious icons, rosaries, gunpowder and firearms. Their annual revenue is derived from: cotton, tallow, hides, honey and, in particular maté, better known by the name "grass of Paraguay". The Company has exclusive right to deal in this commodity; its consumption in the Spanish Indies is colossal as it fulfils the same role as tea does in Europe. The Indians have a totally submissive attitude towards the priests. The men and women alike allow themselves to be whipped like school-children; not only for crimes they commit against the community for they also, voluntarily, solicit chastisement for thoughts they consider to have been improper.

Every year, in each parish, the priests select administrators and stewards to manage the detail of the administration. This election takes place with great pomp in the church courtyard on the first day of the year, it is heralded by the sound of church bells and all manner of musical instruments. Those so elected prostrate themselves at the feet of the priest to receive their badges of office; tokens that in no way exempt them from being whipped along with their brothers! Their greatest distinction is the privilege of being allowed to wear conventional clothing; under normal circumstances, the sole apparel for men and women alike is a simple cotton shift. Parish festivals are celebrated by public merrymaking; there are even comedies performed resembling the theatrical amusements known long ago in Europe as mystery plays.

The priests occupied a large houses close to the church, adjacent to which were two buildings; in one of them were housed the schools of music, painting, sculpture, architecture and the workshops for various trades. Italy provided masters to teach the arts and we were informed that these subjects were learned by the Indians with great facility. The other building housed a great number of young girls who carried on diverse occupations under the watchful eyes and inspection of old women. This area is known as *Le Guatiguasu* or the seminary. The quarters of the priest communicated interiorly with both these sections of the complex.

The priests rise at five o'clock each morning and spend an hour in contemplative prayer. At half past six o'clock they go to mass, then, at seven o'clock, they receive the supplication of the congregation. A public distribution of one ounce of maté is at this time made to every family. After mass the priests take breakfast, say their breviary then work with the administrators, the four most senior of them being his ministers. Later he visits the seminary, the school and the workshops. If he goes out, he does so on horseback and is accompanied by a great number of followers. He takes a meal at eleven o'clock in the sole company of his curate and they remain in conversation until noon after which they take a two hour siesta. He returns to his quarters in time for the rosary following this there is time for conversation until dinner at seven o'clock. At eight o'clock he is expected to be in his bed.

The Indians are already at their places of work by eight o'clock be it in the fields or in the workshops where they are closely overseen by an administrator to ensure they toil productively. The girls spin cotton of which they are given a certain quantity every Monday and are expected to have spun it before the week's end. At five thirty each evening they assemble for the recitation of the Rosary and to again kiss the hand of the priest. Later in the evening there is a distribution of an ounce of maté, a ration of maize and four pounds of beef for each household which generally comprises about eight persons.

On Sunday there is no work, the whole day being taken up in worship; afterwards they are permitted to amuse themselves in pastimes which are as sad as is every other aspect of their miserable lives.

Consequences that are anticipated.

It can be deduced from what has been said above that the Indians possess no manner of property whatsoever and that they are subjected to a regimen of labour and rest which is monotonous and dispiriting in the extreme. Their apathy can be advisably described as mortal; they accept death without regret for they die having never lived. If they become ill recovery is an infrequent event. If

they are asked if their imminent death causes them anguish they reply, in all sincerity, that it does not.

Nobody is in any way surprised that, when the Spaniards take over one of the missions, this noble people, whose lives have been reduced to level of that in a convent, relish the opportunity it provides to break free.

As justification of their behaviour, the Jesuits represent the Indians as only having the intelligence of children. The miserableness of the existence of these adult infants, without any doubt, excludes them from any possibility of ever experiencing the joys and pleasures of childhood.

Expulsion of the Jesuits from the province of de la Plata.

While the Society of Jesuits was doing its best to encourage and support the spread of the missions repercussions, materialising as a result of events in Europe, were causing the reversal of many years of patient application in the New World. The court in Spain, having decided to do away with the Jesuits, wanted rid of them, without delay, from everywhere within their vast domains. Cevallos was recalled from Buenos Aires and Don Francisco Bucarelli sent as his replacement.

Measures taken by the Spanish court to put this into effect.

Before Bucarelli left Spain he had been informed of the nature of the task he was to carry out. He was also instructed to defer its execution pending the receipt of an executive order. He did not have to wait long for this to be delivered. The king's confessor, Count Aranda, and a few other ministers alone were party to the secret of this affair. Bucarelli arrived in Buenos Aires at the beginning of the year 1767.

Measures taken by the Governor General of the province.

After Dom Pedro Cavallas arrived back in Spain a packet-boat was despatched with orders for the Marquis of Bucarelli. These orders related both to this province and to Chile and in both of these locations the General was required to carry the instructions therein. When this vessel arrived in the River Plate in the month of June 1767 the Governor immediately sent two officers, one to the Viceroy of Peru and the other to the President of the Chilean court, they carried with them these sealed orders. He disseminated his personal instructions to those various regions, in his own province, where Jesuits were established. These locations were at: Cordoue, Mendoze, Corrientes, Santa Fe, Salta, Montevideo and Paraguay. Because he feared that some of his commanders in these various locations might not fulfil the Spanish crown's secret orders promptly and to the letter, he specified that they were to remain sealed until the very day planned for their execution. Furthermore, they were to be opened only in the presence of high ranking civil and ecclesiastical officials.

In Cordoue, in particular, the strictest secrecy was to be maintained for here was the heart and focal point of the Jesuit organisation. It was at Cordoue that those selected from the local population, who were destined to become chiefs amongst the people at the missions, were trained in the language and usages of the Jesuits.

Gaining possession of the Jesuits important documents was considered to be a critical element of the plan.

The Marquis of Bucarelli decided to send an officer, in whom he had complete confidence; to whom he had conferred the title King's Lieutenant for the region. Under this pretext he was dispatched to the mission at Cordoue accompanied by a detachment of troops.

It remained only to settle the manner of executing the king's orders regarding the missions. Would the local population tolerate the arrest of the Jesuits in the midst of their community? Success would be assured only if there were sufficient troops available to deal with any situation that might arise. It

would in any case be imperative, prior to deposing the Jesuits, that an alternative form of government was ready to take over to forestall any disorder or anarchy that might consequentially arise.

The authorities decided to temporise, limiting their immediate action to advising each mission by letter that a magistrate and a local headman was being sent into the missions immediately. These officials would inform the missions of the King's proclamation and explain to its content. This action was executed with the greatest possible speed to ensure the Indians would not be concentrated in the immediate precincts of the mission when the news of the Society's disbandment broke.

By these means they achieved two objectives: firstly they had hostages in their power to ensure the compliance of the locals once the Jesuits had been withdrawn and, secondly, they would gain the support of the senior Indians by means of lavishing favourable treatment upon them when they came to Buenos Aires. This would be an opportunity for convincing them that their living standards would improve once they were no longer "held on a leash". They were to be given the same privileges and rights of property ownership as the rest of the King's subjects.

The secret is almost revealed by an unforeseen accident.

All this scheming went on under a cloak of deepest secrecy and, although it might be considered that the arrival of a ship from Spain, carrying nothing but some letters to the General, ought to have aroused some suspicion; the fact is the king's intentions remained unsuspected.

The exact time for implementing the plan at each location was chosen to ensure that all the couriers had time to reach their destinations. The Governor anxiously awaited this moment's arrival. The entry of the two king's chambekins, the *Andatu* and the *Aventura*, from Cadiz, however, almost caused these plans to go awry.

The General had instructed the Governor of Montevideo that, in the event of ships arriving from Spain, he was not to make contact with anyone aboard before he, the Governor, had been informed.

Unforeseeably, one of the vessels started to sink after entering the river; the Governor was thus compelled by the seriousness of the situation, to send assistance to rescue the ship's company.

The General's intention in all this was to prevent it being learned locally that the Jesuits in Spain were being arrested; these ships having sailed after their detention had begun.

An officer from one of these ships was immediately sent to the Marquis of Bucarelli and arrived at Buenos Aires on the ninth of July at six o'clock in the evening.

Action taken by the Governor General.

The Governor did not equivocate; he straightway dispatched orders to the Commanders in the various regions instructing them to open their packets and carry out the orders therein with all possible haste. By two hours after midnight all the couriers were on the road and the two Jesuit establishments in Buenos Aires had been invested. The Holy fathers, in those places, were astonished and thought they were dreaming when they were so rudely awakened, taken into captivity and had to witness the confiscation of all their documents.

The next day a ban was published forbidding, upon pain of death, any dealings with the Jesuits. Five merchants were arrested who, it was claimed, had intended to forewarn the mission at Cordoue.

The Jesuits in all the Spanish towns are arrested.

The king's orders were carried out, in exactly the same ruthless manner, in every one of the towns. Everywhere the Jesuits were taken completely by surprise, none of them having had the least suspicion of what was afoot.

Their papers having been seized, they were taken from their houses by troops with orders to fire upon any who attempted escape. Such harsh measures turned out to be unnecessary for the priests exhibited total resignation, they went far as to debase themselves in the face of the force confronting

them saying that they merited the punishment by which God now chastised them for the sins they had committed.

The Cordoue Jesuits, numbering more than one hundred, arrived at Encenada at the end of August. Shortly afterwards, those from Corrientes, Buenos Aires and Montevideo also surrendered.

As has already been said, at the end of September they were embarked aboard ships of the first available convoy. Others, still en route for Buenos Aires, were shipped out with equal expedition.

The arrival, at Buenos Aires, of the *Caciques*⁴⁵ & *Corregidores*⁴⁶ from the missions.

On the 13th of September the administrators and the headmen of each native group, who had previously been sent for, arrived. They were accompanied by some Indians who had left the missions prior to any of the events that would have caused them to be aware of why they were being sent for. They heard the news while still on the way and, though strongly moved, they continued towards the capital. The last instruction of the priests to their dear neophytes had been that they should believe nothing that the Governor General might tell them. "Be prepared, my children", they had warned, "to hear an utter pack of lies".

When they arrived they were led into a square in front of the government buildings; I was present there when they were received. There were 120 of them, they were mounted and were assembled in a crescent of two ranks.

They appear in front of the Governor General.

A Spaniard, familiar with the Guarani language, acted as an interpreter on their behalf. The Governor came out onto a balcony and told them they were welcome and need have no concerns for their security. He informed them that the time had come for them to be given details of the king's intentions. He told them, in simple language, they were to be released from slavery and they were to be given the right of property ownership; something they had hitherto been denied. They responded by cheering unanimously, they raised their right arms towards heaven and wished a thousand blessing upon the king and the governor. They appeared not to be disgruntled but, it was not difficult to see their expressions were ones of surprise rather than of joy.

After leaving government house they were taken to a Jesuit mission where they were lodged, fed and supported at the crown's expense. When the governor had summoned them to Buenos Aires he had asked particularly that the famous cacique Nicolas attend. He, however, had written in reply that his great age and infirmities prevented him making the journey.

On the several occasions when I had visited them prior to my departure from Buenos Aires; the Indians had not yet been summoned to confer with the governor. It being his wish they first had some time to learn something of the language and to become more familiar with the Spanish way of life. They struck me as being naturally of an indolent disposition; they had about them a stupefied air, like that of an animal trapped in a cage. It had been drawn to my attention that they were well educated; but, as they spoke nothing but the *Guarani* language, I was not in a position to make an appreciation of the depth of their understanding.

I once heard a cacique, considered to be an excellent musician, play a sonata; however, for myself, I heard only sounds similar to what might be produced upon a mechanical organ.

Shortly after their arrival in Buenos Aires, (the news of the expulsion of the Jesuits having by this time become known at the missions), the Marquis of Bucarelli received a letter from the senior church dignitary present at that time; he assured him of his submission to the king's orders and that all the native people would be equally compliant.

⁴⁵ A tribal headman or chief. -JFF

⁴⁶ Spanish word for the main administrative officer of a town or region. -JFF

The extent of the missions influence.

The missions of the *Guarani* and the *Tapes* tribes, which had been founded by the Jesuits on the Uruguay River, were not the only ones the Jesuits had founded in South America. Further to the north they had brought together and subjugated under their own laws: the Mayas, the *Chiquitos* and the *Avipones*. They had also formed Reductions⁴⁷ in the South of Chile and on the coast of the island of Chiloe. From here they had over the past several years opened up a route into Peru which passed through the territory of the *Chiquitos*. This route was much shorter than the one in use up until that time. Moreover, in all the regions they entered they set up signposts bearing the device of their order and on the maps that they created they indicated the reductions they had established under their denomination, *oppida christianomm*.⁴⁸

When the property and possessions of the Jesuits was seized it was expected that considerable sums of money would be found, in fact, hardly any was. Their storehouses, it is true, contained merchandise both of local and of European manufacture and that some of these goods were of a type never used in those provinces. They also owned a considerable number of slaves; in Cordoue alone these numbered 3,550 souls.

My pen baulks at recording all that the government claimed to have found in the papers that were seized from the Jesuits. Hatred remains still too fresh in peoples' minds for a distinction to be made between the claims that are true and those that are false. I prefer merely to say that the great majority of the members of this society were in no way involved in any secret conspiracy or to personally profit to the detriment of the state.

Even if there were amongst them a few conspirators, the great majority of them were men of good faith who expected nothing from the institution other than the piety of its founder and to serve in spirit and truth the God to whom they had devoted their lives.

Besides, since my return to France I have learned that when the Marquis of Bucarelli set out from Buenos Aires for the missions he met no resistance nor encountered any obstacle whilst he was carrying out the orders of his Catholic Majesty.

An impression of the manner in which this interesting event was concluded will be gained by reading the following two documents. They contain the detail of what occurred at one of the first locations to be entered.

It describes event at the reduction of Yapegu, located on the Uruguay River. It was the first establishment the Spanish general reached; what took place there is representative of that at all the locations subsequently visited.

Details of the entry of the Governor General into the missions.

Translation of a letter from a captain of grenadiers in the Mayorque regiment. He commanded one of the expedition detachments sent against the missions in Paraguay.

Yapegu 19th July 1768.

"We arrived here yesterday and were overjoyed at the manner of our reception. Our general was welcomed much more warmly than could reasonably have been expected from so simple a people unaccustomed to events of the brilliance they now witnessed.

There is here a college possessing a vast number of valuable church ornaments. We also found a great quantity of silver plate. The people here do not present themselves as well as do those in Buenos Aires, but, they are better organised and more numerous. The houses are all exactly alike, having seen one dwelling they have all

⁴⁷ A Reduction was the name given to a mission town, it was contrived to describe the process of luring the wild people from their nomadic state into settlements. -JFF

⁴⁸ A Christian settlement. -JFF

been seen. The same thing applies to the people, men and women are all dressed in an utterly uniform fashion. There are many musicians here but they are all of them of mediocre quality. The moment we arrived on the outskirts of the mission His Excellency instructed us to go forward to capture the principle priest and six other priests belonging to the order of Jesus and to place them under close arrest. We believed that they would eventually be embarked into ships on the River Uruguay. But, until their brothers in the other missions had been subjected to the same fate, they were to be held at Salto. We thought that our stay at Yapegu would be of five or six days duration before we continued on our way toward the other missions. We were most pleased that our general provided the very best food and drink available for us. Today we attended an opera and later there will be a stage performance. The good people here do everything within their capability to provide for our comfort and well-being. At this place we also saw the celebrated Nicolas; he who the governor had wanted in his custody so urgently. He was in a deplorable state and almost naked. Although he was seventy years old he was in possession of all his faculties. His Excellency spent much time in conversation with him and appeared to be satisfied with the outcome. That is all I can tell you that you know not already".

Promulgation published at Buenos Aires concerning the entry made by H.E. Don Francisco Bucarelli y Ursua into the mission at Yapegu on 17 July 1768, a Jesuit mission of the Guarani, located in Paraguay.

"At eight o'clock in the morning His Excellency left the chapel of Saint Martin which is situated about one league from Yapegu. He was escorted by his guard of grenadiers and dragoons. Previously he had dispatched the Mayorque⁴⁹ Company of grenadiers to secure and hold the crossing of the River Guivirade, which has to be crossed by raft or rowing-boat. This river is about half a league from the mission. Immediately after he had crossed His Excellency was met by headmen, the magistrates and the ensigns from the mission carrying the Royal standard. His Excellency, having received the honours and compliments appropriate to such occasions, mounted his horse for his ceremonial entrance. The dragoons marched forward and were followed by two aides-de-camp who preceded His Excellency. After them came the two companies of Mayorque grenadiers followed by a procession of headmen, magistrates plus a great number of mounted men from the surrounding countryside. The parade arrived at the principal square in front of the church. His Excellency dismounted; Dom Francisco Martinez, the senior curate at the outpost, introduced himself on the portal steps and bade him welcome. He accompanied him into the presbytery to the sound of a Te Deum sung entirely by Guaranis who, not only played all the instruments, but had also composed the music themselves. During this ceremony the artillery fired a triple salute at the conclusion of which His Excellency retired to his quarters, now established in the priest's college, around which the troops had positioned themselves until they were ordered to make camp in the *Guatiguasu*, the house of the recluses".

Let us now resume the account of our voyage. Although the spectacle of the revolution we had witnessed at the missions was an unusual episode during the course of our voyage; we, nevertheless, did not consider it to be amongst the most interesting events we witnessed.

⁴⁹ Raised in Majorca. -JFF

CHAPTER VIII

*Departure from Montevideo; the passage to Maidens Cape;
Entrance into the strait, dialogue with the Patagonians;
passage to Saint Elizabeth Island.*

Nimborum in patriam, loca foeta furentibus austris.
Virg. Æneid. Lib. I ⁵⁰

The Etoile goes down-river from Baragan to Montevideo.

The docking and reloading of the Etoile had cost us the entire month of October and no little expense. It was not until the end of the month that we were in a position to settle our accounts with the Spanish Commissariat and the other suppliers. I decided to pay them out of the silver that we had received in settlement for our outlay in the Falkland Islands, rather than draw letters of credit on the royal treasury. I continued this same policy for the discharge of our debts at all our future foreign ports of call for the simple reason it could be done in this way more cheaply and with greater expedition.

November 1767.

Difficulty encountered during this passage.

At first light on the 31st of October I joined up with the Etoile, she having sailed from Montevideo to *la Encenada*. It is most important that the channel between the Orteiz bank and another small one to the south of it be carefully kept to. Neither of the banks is marked with buoys and it is often impossible to see the coast to the south because it is very low lying.

In truth, chance has placed a sort of beacon on the western contour of the Ortiz bank; this is in the form of the two masts of a sunken Portuguese ship that has, by good fortune, remained upright. Elsewhere in the channel there is 4 to 4½ and occasionally 5 fathom of water with a bottom of black mud but, the slopes of the Ortiz bank consist of a reddish sand. In going from Montevideo to *la Encenada*, once one is past this beacon, to the east by south there is 5 fathoms of water and you are beyond the banks. We observed in the channel 15° 30' north-east variation.

Loss of three seamen.

During this crossing we lost three men drowned. They were alongside in one of the ships boats while the ship was going about when their boat capsized and was forced beneath our hull. Despite all our efforts we were only able to save two men; the boat was also recovered as the painter had not parted. We were disconcerted to discover that, despite the repairs we had carried out, the Etoile was still making water. This condition caused us to suspect that defective caulking might be a problem throughout the hull's upper timbers for she had been dry until she was drawing more than 13 feet.

Preparations for leaving the River Plate.

We spent several days in taking on board, from the Etoile, all the victuals we could find room for. We also re-caulked our upper-works, this was work we had not been able to do sooner because our

⁵⁰ To the home of the clouds, a place of raging winds of the South. -JFF

caulkers were working on the Etoile. We repaired the damage to the ship's boat, (*chaloupe*) cut grass for our cattle and brought back on board all that had been temporarily stored ashore. The 10th the day was spent in hoisting our topmasts and setting up the lower yards and rigging. We would have been able to sail that same day had we not been aground. On the 11th, with the rising tide, we moved over to that part of the roadstead in which ships are always afloat and cast our anchor.

During the following two days the weather was foul and prevented our departure. This delay, however, did not mean our time was entirely wasted for a schooner came in from Buenos Aires laden with flour and, although we were hard pressed to find stowage for it, we took on-board 6,000 kilograms [60 *quintaux*].

Taking all things into account, we now had food enough for ten months; notwithstanding the fact that the greater part of our liquid refreshments consisted of brandy!

Condition of the crew when we left Montevideo.

The crew, after their long stay in the River Plate, were in excellent health. While we were there one third of the crew had slept onshore, turn and turn about. They had dined well, often upon fresh meat; they were in excellent fettle and ready to face all the gruelling work and hardship that the onerous journey lying ahead would entail.

I had been obliged to leave behind in Montevideo the master pilot, the head carpenter, the chief gunner and one of the frigate's petty officers. They had all become unfit for sea-service, either by their advanced years or as a result of incurable infirmity. Additionally, and in spite of all the precautions we had taken, there had been a total of twelve desertions from the two ships; some of them being sailors some soldiers. The effect of this had been in some way offset as I had enlisted, while at the Falklands; some seamen who had been engaged in fishing, an artificer, a merchant marine officer and a surgeon. Consequently my crew was numerically the same as it was when we left the river at Nantes a year previously.

The Location of our Departure Point on leaving Montevideo.

On the 14th of November, at half past four in the morning, the wind being fresh from the north, we set sail from Montevideo. At half past eight Flores Island bore due north and by midnight we were 12 leagues to the east and E $\frac{1}{4}$ S East of Montevideo; from this position I recorded my point of departure as 34° 54' 40" longitude east from the Paris meridian.

I had taken the position of Montevideo to be as Mr Vernon had shown from his observations. These had fixed it's longitude at 40° 30', somewhat further to the west than the chart of Mr Bellin had placed it. I had also taken advantage of the time spent on shore to confirm the accuracy of my octant by taking the distances of known stars; this instrument was found to give the height of stars as being too small by 2 minutes and, from now on, I took this correction into consideration.

I give notice here that throughout this journal I will give the bearings of the coastline such as they appear from the compass; I will draw attention to it when I give them corrected for variation.

Soundings and navigation until we arrive at the Magellan Straits.

On the day of our departure we could see the land until sunset; the depth of water became gradually, but continuously, greater and bottom changed from mud to one of sand. By six o'clock in the evening we had 35 fathoms with a seabed of grey sand. Fifteen minutes after noon I signalled the Etoile to take soundings and she found a depth of 60 fathoms, same bottom. At noon we observed the latitude to be 36° 01'.

From the 16th until the 20th the wind was against us with a heavy sea running and we held to courses which were the least disadvantageous to us under our fore-main-sails and close-reefed top-sails. The Etoile had by now struck her top-gallant masts and we had sailed without ever putting ours aloft.

On the 22nd it came on to blow violently and the storm was accompanied by squalls which lasted all night. There was a dreadful sea running and the Etoile made a signal that she was in difficulty; we waited for her under fore-sails and our main-course with the main clew garnet hoisted in. It appeared to us that the store ship's fore-top-sail yard had carried away. By the morning of the following day, the wind and the sea having gone down somewhat, we made more sail and on the 24th I summoned the Etoile to approach to within hailing distance in order to find out what damage she had suffered during this spell of stormy weather.

Mr de La Giraudais informed me that besides the yard of the fore-top-sail, four of his brace-chains had also parted; he added that with the exception of two bullocks all the animals that he had embarked at Montevideo had been lost. We had suffered the same misfortune ourselves, though to him that must have been little consolation. Who knows when we will reach a place where we will be able to make up this loss?

During the rest of the month the winds were variable between south-west and north-east; the currents carried us towards the south quite rapidly until, at 45° of latitude, they became negligible. For several days on end we sounded without finding any bottom and it was not until the evening of the 27th that, at about 47° of latitude and at a distance we estimated to be 35 leagues from the coast of Patagonia, we found a bottom of mud and fine grey and black sand, at a depth of 70 fathoms.

From this day forward we had constant soundings at 67, 60, 55, 50, 47 and finally, 40 fathoms; we could now see land for we had Maiden's Cape (*Cap des Vierges*) in sight. The bottom was occasionally muddy but, most of the time composed of fine sand, sometimes grey sometimes yellow accompanied by small red and black gravel.

A rock found not to be marked on the charts.

I did not want to approach the coast until we had reached 49° south latitude because of a rock that I had noticed in 1765 at $48^{\circ} 30'$ south latitude and lying about 6 or 7 leagues from the coast. It was sighted in the morning, at the same moment I saw the land. Consequently, having taken a noon sun-sight and the weather being very good, I was able to determine its exact latitude. We passed within a quarter of a league of this outcrop which the lookout had at first thought to be the blowing of a whale. On the 1st and 2nd of December the winds were favourable from the north of the North N East, it was misty and there was a heavy swell running. During the day we made as much sail as was safe to do and we passed the night under the fore-sail and close-reefed top-sails.

During these days of patchy weather we often saw albatrosses which to sailors, in all of seas of the world, are a sign of bad luck. We also saw stormy petrels which are never seen when the sea is calm and the weather serene.

We saw sea lions and penguins and a great number of whales. The bodies of some of these enormous animals appeared to be encrusted with the whitish worms that attach themselves to the hulls of ships when they are left to rot in port. On 30th November we saw two white birds as large as pigeons which landed on our yardarms. On a previous occasion I had seen flights of these birds crossing the bay in the Falkland Islands.

Maiden's Cape is sighted.

On the afternoon of 2nd December we recognise Maiden's Cape, directly south of us, at a distance of about 7 leagues

The Position of this Cape.

I had taken a morning sight which put us at latitude 52° south; I was therefore at latitude $52^{\circ} 03' 30''$ south and longitude $71^{\circ} 12' 20''$ west of Paris. Having thus established the ship's position and, in combination with the bearings taken at Maiden's Cape we established its position as being $52^{\circ} 23'$ south latitude and $71^{\circ} 25' 20''$ longitude west of Paris.

As Maiden's Cape is an interesting geographical feature I feel it is necessary to give an account of the reasons why I consider the position that I have given is accurate.

Discussion concerning the position given for Maiden's Cape.

On the afternoon of 27th November the Chevalier du Bouchage had observed 8 distances of the moon from the sun; the resulting average of these had put us at west $65^{\circ} 30'$ longitude over an interval of 1 hour 43 minutes 26 seconds in true time. Mr Verron, for his part, had observed 5 distances of which the result gave our longitude, at that the same instant, as $64^{\circ} 57'$ west. The weather was very good and extremely favourable for making observations. Two days later, on the 29th at 3 hours 57mins. 35secs. true time, Mr Verron, by 5 observations of distance of the moon from the sun, determined the west latitude of the vessel to be $67^{\circ} 49' 30''$.

Now it follows, from the establishment of the position of the ship at the time Maiden's Cape was sighted and the longitude determined on 27th November by the average results of Chevalier Bouchage and Mr Verron, that the longitude of the Maiden's Cape is observed to be $71^{\circ} 29' 42''$ west of Paris.

The observations of the afternoon of the 29th, also relating to the position of the ship when we raised the Cape, give a result a little more to the west of $38' 47''$. However, it appears to me that one ought rather to follow those of the 27th, even though at that time we were two days further away, because their observations differed by only $3' 30''$ and were made in a greater number by 2 observers who did not compare their results. They therefore carry a credibility which it is difficult to gainsay. Taken all

in all, if one wishes to take an average between the observations on these 2 days, one arrives at a longitude for Maiden's Cape of $71^{\circ} 49' 5''$. This differs, from the first determination, by only by 4 leagues, being the same to within a league, as that given by my estimation from the distance run; for that reason it that is the one I will settle on.

This longitude for Maiden's Cape is more easterly by $42' 20''$ than the position given to it by Mr Bellin and that is no more than the same difference given by him for the position at Montevideo; a position of which we gave account of at the beginning of this chapter.

The Lord Anson's charts gives the longitude for Maiden's Cape as 72° to the west of London and, consequently, almost 75° to the west of Paris. This is an even more significant error than the one he made in determining the position of the mouth of the River Plate and generally for the whole of the coast of Patagonia.

Discussion on an instrument suitable for measuring longitude at sea.

The observations that we have just been discussing have all been made using the English octant. This method for determining longitudes at sea, by the means of distances of the moon from the sun or from the stars in the zodiac, has been known for several years. Messes de la Caille and Daprés have, in particular, made use of it at sea using the octant made by Mr Hadley.⁵¹ However, as the level of accuracy obtained by this method depends greatly on the precision of the instrument with which the observation is made. It follows that if the heliometer of Mr Hadley could be made capable of measuring greater angles it would be an extremely good instrument for making these observations of distance. M l'Abbé de la Caille seems to have already thought about this because he has constructed one that already measures arcs of 6° to 7° and if he refrains in his writings from advocating it as suitable for making observations at sea it is only because he considers it would be very difficult to use aboard ship.

Mr Verron brought aboard with him an instrument he had already used on other voyages with Mr de Charnieres. It is called a called a megameter and he intends to use it during the course of this one. To us, this instrument appeared to differ from the Helioscope of Mr Bouguer only in that the screw which makes the objective move is much longer permitting it to open to a much greater extent so making this instrument capable of measuring angles of 10° and this is the limit of the megameter Mr Verron has on board.

We wish it were possible that in lengthening the screw even more one would be able to extend the existing range which is, at present, too narrow for the frequency and even for the exactness of observations, but unfortunately, the laws of optics limit the acceptable distance between the objectives. It would also be necessary to remedy those limitations which affect the instrument of M l'Abbé de la Caille concerning the element by which observations are made. In general it seems to me that the reflecting quadrant of Mr Hadley would be the best choice with the proviso that it gives the same level of precision.

Difficulties we encountered prior to entering the strait.

From the afternoon of the 2nd [December] we had sight of the Maiden's Cape and soon after that we could see Tierra del Fuego; the wind was in our face and, there being a heavy sea running, we were constrained from entering the strait for several days. At first we beat to windward until six o'clock in the evening of the 3rd at which time, the winds having eased somewhat, we were able to approach the entrance of the strait. Unfortunately, this situation didn't last very long as by half past seven the wind had died away completely and we could no longer see the coast upon which a mist had descended. At 10 o'clock the wind freshened and we spent that night beating to windward.

⁵¹ An English instrument maker, see Appendix 7.11 - JFF

On the 4th, at three o'clock in the morning, we approached the land with a good fresh breeze from the north behind us. Nonetheless, the misty conditions and the heavy rain that was falling hid the land from our sight and made it necessary to head out into the open sea once more. At five o'clock in the morning the mist lifted slightly enabling us to see Maiden's Cape and we took this opportunity to head into the Strait.

Almost immediately the wind shifted round to the south-west, from which quarter it was soon blowing a full gale; the mist grew thicker compelling us to heave-to between the continent and the land of Tierra del Fuego.

Our fore-sail had been torn to shreds on the afternoon of the 4th and at almost the same time, our soundings giving us only 20 fathoms of water, I became fearful of the rocks that extend south-east from the Maiden's Cape, and so, I proceeded ahead cautiously under nothing more than bare poles, a manoeuvre which gave us the additional advantage of providing an opportunity to spread a new fore-sail.

Remarks on the nature of the seabed at the entrance to the Strait.

I learned later that the soundings I was getting were nothing to worry about because, we being well within view of the land, they were depths within the channel itself. I will add here, for the benefit of those who in future approach this location in conditions of poor visibility, that when soundings show that the seabed is of gravel, then you are closer to Tierra del Fuego than to the continent; on the other hand, when closer to the continent one finds fine sand and sometimes mud.

At five o'clock that evening we came up into the weather under our main and mizzen-stay-sail and at half past seven o'clock the wind went down and the mist lifted. We made sail but the tacks we were making were not to our advantage and we drew further away from the coastline.

Even though we had good weather on the fifth and the wind was favourable it was not until two o'clock in the afternoon that we saw land bearing South $\frac{1}{4}$ S West to South W $\frac{1}{4}$ West at a distance of about 10 leagues. At four o'clock we could make out the Maiden's Cape and we set course to pass it at a distance of between a league and a half and 2 leagues. It is not a good idea to approach this Cape any closer because of a bank that extends from it for about that same distance. In fact I believe we passed over the tail of this bank because we were making soundings frequently and between two soundings one of 25 and the other 17 fathoms we received a signal from the Etoile, sailing in close company with us, that she had a sounding of 8 fathoms but, immediately afterwards, the water had become deeper.

Nautical commentary on the entry into the Strait.

The land at Maiden's Cape is level and of medium height, but, its extremities are very steep. The picture of it given by Lord Anson is, in fact, very accurate. At half past 9 o'clock in the evening we had rounded the western point of the most southerly part of the entrance to the strait from where a chain of rocks extends out into the sea for a distance of one league.

We sailed on under fully reefed top-sails with our main-sails brailed up until eleven o'clock in the evening at which time Maiden's Cape bore due north from us. A stiff wind began to blow, the skies clouded over and there was a real threat of a storm; and so, I made up my mind to pass the night standing on an off the coast.

At dawn on the 6th I shook out the top-sails reefs and steered towards the West N West. We saw no land until half past four when it appeared that the tides had pushed us towards the South S West. At half past five o'clock, we being two leagues from the continent, we recognised Cape Possession to the West $\frac{1}{4}$ N West and West N West. This Cape is easily recognised as it is the first prominent land that one sees beyond the northerly point of entry into the strait. It is more southerly than any other part of the coast and it forms, between the cape itself and the first narrows, a great recession of the coast known as Possession Bay; we could also see the land of Tierra del Fuego.

The winds soon resumed their normal direction of between west and north-west; we made tacks that were most advantageous to us for entering into the Strait and were tempted to hug the coast of Patagonia and thus take advantage of the tide which at the time was carrying us westward. At noon we took a sun sight and the bearing that I took at the same instant gave me the latitude for Maiden's Cape. This latitude was within a minute of the one I had obtained by my observation on the 3rd of the month. We also took advantage of this same observation to calculate the latitude of Cape Possession and that of the Cape of the Holy Spirit on Tierra del Fuego. For the entire day of the 6th we continued to make our way to windward under courses and top-sails. The following night, the visibility being excellent, we sounded often and never went more than 3 leagues away from the continental coast. Against these adverse conditions we made little headway for the tides pushed us back just as far as they had previously helped us forwards and by noon on the 7th [December] we were still under the foot of Cape Possession. Cape Orange still remained the south-west of us at a distance of about 6 leagues.

Description of Cape Orange.

This Cape is easily recognisable because it has a fairly high hillock, very sheer where it comes down to the sea at which point it forms the southern entrance of the first narrows.⁵²

The Reef at this Cape.

The point of the Cape is dangerous because there is a reef extending at least three leagues from the north-east of it and I could clearly see the waves breaking upon it. By 1 o'clock in the afternoon the wind had moved round to the North N West and we took advantage of it by making good speed on our preferred heading. By half past two we had succeeded in reaching the entrance of the narrows and there yet one more obstacle was waiting for us: even with a good stiff breeze blowing and all our sails, set we found that it was impossible to make any way against the tide. By 4 o'clock the tide was running against us at 6 knots and we were actually going astern, our struggle against it was totally in vain. The wind, being less constant than were our efforts to make progress against it; we had no choice but to allow ourselves to be carried backwards. Our principal concern was that we would find ourselves becalmed in the straits at the mercy of the tides and the currents and the risk of being cast upon the reefs associated with the Capes to the east and west of the entrance into the narrows.

Anchorage in Possession Bay.

We were steering North $\frac{1}{4}$ N East searching for a mooring within the bight of Possession Bay. The Etoile, which was closer to the land than we were, suddenly passed from soundings of 20 fathoms to only 5; we stood-away our bows to the east with the wind behind in order to avoid a reef that appeared to rise from the seabed about the complete circumference of the bay. For a considerable time we found the bottom to be of rock and stones and it was not until seven o'clock in the evening that we found, in 20 fathoms on a bottom that was a mixture of sandy-mud and black and white gravel; we let go of our anchor 2 leagues from the coast.

Possession Bay is open to winds from all directions and offers only poor holding ground. In the hinterland of this bay 5 hillocks rise up; one of them being of a considerable height whilst the other is quite small and pointed. We gave them the names Father Aymond and the Four Sons of Aymond and

⁵² From Maiden's Cape until the entrance of the first narrows the distance is approximately 14 to 15 leagues and the strait everywhere here is between 5 and 7 leagues broad. The Northern coast up to Possession Cape is quite low lying and level with few irregularities. From this cape it is necessary to be aware of the existence of a reef within the bay of the same name. When the hillocks, which I have given the name of the Four Sons of Aymond, appear to be only two in form, you are abreast of this reef. De B

they serve as excellent reference points in this part of the strait. During the night we made soundings at various times and states of tide but observed only little difference in the depth. At half-past eight in the evening the tide changed direction towards the West and at 3 o'clock in the morning it started flowing once again towards the East.

Passage through the First Narrows.

On the morning of the 8th [December] we set sail under courses and top-sails with two reefs; the tide was against us but we forged on against it with a fine north-westerly breeze.⁵³ By eight o'clock the wind had turned against us and we were forced to beat our way forward suffering violent squalls from time to time. At 10 o'clock the tide started to flow towards the west with considerable force so we came up under top-sails at the entrance to the first narrows and allowed the currents to carry us forward against the wind. We tacked, from time to time, when we found ourselves a little too close to one or other of the two shores. In this manner we passed through the first narrows in only two hours⁵⁴, this in spite of the wind which at all times was very strong and blowing from dead ahead.

We see the Patagonians.

This morning the Patagonians, who had kept fires burning the entire night long in the most secluded part of Possession Bay, hoisted a white flag on an elevated piece of ground. To this signal we replied by raising our ship's house flags. These Patagonians are, without any doubt, the same that had been seen in Boucault Bay by the *Etoile* in the month of June 1766⁵⁵. We believe that the flag they were flying was the one that had been given to them by Mr Denys Saint-Simon as a token of friendliness. The care they must have taken in its preservation clearly show that they are a peaceable people and true to their word or, at the very least, respectful towards any gifts they receive. When we got into the channel we could distinctly see a group of some twenty men on the mainland of Tierra del Fuego. They were clad in skins which covered their bodies; they were running at full tilt along the coast to keep up with the passage of our ship. They appeared, from time to time, to make hand signals indicating their desire to come out to us.

The Americans of Tierra del Fuego.

The Spanish had told us that the natives in this region had no propensity toward a cruel disposition that is so common amongst uncivilised peoples. They had welcomed, with great kindness, the crew of the vessel *la Conception*, when it was wrecked upon their shores in the year 1765. They had even helped to salvage part of the cargo and to build shelters in order to protect it from the weather. From the wreckage of their ship the Spaniards had built a barque in which they had reached Buenos Aires. It was for the purpose of transporting missionaries to these Indians that the chambekin *l'Adelous* had been dispatched at the time we were preparing to sail from the River Plate. We were interested to learn that blocks of wax from this ship's cargo were transported by the currents to as far away as the Falkland Islands, where they had been found in 1766.

⁵³ when one wants to make the passage of the first narrows it is advantageous to keep about a leagues distance from Cape Possession and then to steer South $\frac{1}{4}$ S West, taking care not to be pressed too far to the south because of the reef which extends North N East and South S East from Cape Orange for a distance of 3 leagues. De B.

⁵⁴ The first narrows lies in an attitude of North N East and South S West, it is no longer than three leagues in length while its breadth varies from one league to one and a half leagues. I have already drawn attention to the reef at Cape Orange. After having passed through the first narrows there are other reefs, though of lesser extent, in the vicinity of the points on both side and extend towards the south-west. In the narrows proper there is plenty of water. De B.

⁵⁵ Located at the western end of the Magellan Strait, near to *Cabo San Gregorio*, Chile.

Anchorage in Boucault Bay.

By midday, as we were now clear of the narrows, we set sail; the wind was generally from the south and the set of the tide continued to push us westwards. By 3 o'clock both wind and tide had dropped away and we anchored in Boucault Bay on a muddy bottom in 15 fathoms of water.

As soon as we were moored I had one of the ship's boats lowered and also one from *l'Etoile*. Ten officers were embarked into the boats all armed with rifles and they then set out for the shore within the bay. We took the precaution of keeping the boats afloat and the crews at the oars. Hardly had we set foot on shore when we saw six mounted Americans coming galloping towards us. They dismounted at a distance of 50 paces from us and straightway rushed up to us crying "*chaoua*." When they came up to us they held out their hands and pressed them against ours; they took us into their arms and hugged us crying at the top of their voices the words "*chaoua, chaoua*," which we repeated back to them.

These good people appeared to be delighted that we had arrived. Two of them, who at first trembled when they approached us, did not take very long to become reassured once they had embraced us and we had hugged them back. We then dispatched our ship's boat to bring back some newly baked bread and some pancakes; we shared it out among them and they ate it with relish.

With every minute that passed more and more of them joined the group until they numbered more than thirty, among them were some young people and a child of 8 or 10 years of age. All of them approached us confidently and we hugged them as we had done the others. They did not seem to be the least surprised to see us; they made sounds with their voices imitating gunfire so it seemed to us that they were familiar with firearms.

They appeared to be anxious to please us in any way they could. Mr de Commerçon and some of our gentlemen occupied themselves in collecting plant samples. Seeing this, several of the Patagonians also began to look for plants and brought to us those species they thought we were collecting. One of them, observing that the Chevalier du Bouchage was likewise occupied, came up to him and showed him his eye which was either afflicted by disease or injury. He made signs to him to point out which of the plants could be used to make a curative medicine. In this manner we learned that they were aware of the benefit of making medicines from plants and that these could be applied to cure conditions with which men had become afflicted. This was the medical principle of Makhaon, the healer of the gods.⁵⁶ There are, I am aware, many Makhaons to be found amongst the Indians of Canada.

We bartered with them, they giving us guanaco and vicuna pelts and we them some trifles that were valuable in their eyes. They asked us to give them tobacco to smoke; the colour red seemed particularly attractive to them and as soon as they saw something we were wearing in that colour they came up to us and began to stroke it, giving us to understand they were very anxious to possess it.

And so it continued, with every item we gave to them, with each new caress, they once again started shouting "*chaoua, chaoua*." at the top of their voices so that we were almost deafened by the noise they made. We gave them a little brandy to drink making sure that each one of them drank no more than one mouthful, having swallowed the liquid they began to slap their throats with their hands and started making gasping noises of a trembling and inarticulate nature which they ended by rolling back their lips. Every one of them gave the same strange performance, it was something that, to us, appeared a most curious and bizarre spectacle.

However, as the day was wearing on it was time for us to think about returning to the ship. As soon as they saw the preparations we're making they appeared to become angry; they gave us to understand by signs that they wanted us to wait and that more of their compatriots were on the way to meet us. We assured them that we would return the next day and that we would bring with us the things that they had asked us for.

⁵⁶ One of the offspring of Asclepius, the Greek God of medicine. -JFF

We gained the impression that they would have much preferred us to sleep ashore. When they saw that we were going to leave they came with us right down to the edge of the beach and one of the Patagonians started singing to accompany our short journey. Some of them waded into the sea up to their knees in order to follow us for as long as possible.

When we got to our boats we found it necessary to watch everything most carefully for they would steal anything that they could lay their hands on. One of them grabbed a sickle but, as we caught him in the act, he gave it back to us without any resistance.

Before we were out of sight of the beach we saw that the size of their group was getting constantly bigger as others of their tribe arrived at full gallop. As we moved away from the shore we were not sparing in our shouts of "*chaoua*" so that the entire coastline resounded with the sound of our voices.

Description of these Americans.

These Americans are the same as the ones that had been seen by *l'Etoile* in 1766. One of our sailors, who had been on that store ship during the previous voyage, recognised a man as one that he had seen before. All the men were quite tall; amongst those we saw, none was less than 5 foot 6 inches in height. None of them, however, were taller than 5 foot 9 or 10 inches. The crew of the *Etoile* told me that during the previous voyage they had seen some who were over 6 foot tall. What they do have about them, that gives them the appearance of being gigantic, is: the great breadth of their frames, the large size of their heads and the thickness of their limbs. They are robust and well fed, they are ever alert, their flesh is firm and well developed, they appear as men should who live in a natural way nourished by a diet of good wholesome simple food and, as a consequence, their bodies exhibit a muscular development reflecting their wholesome way of living.

Their general appearance is neither hard nor disagreeable; some of them are even quite attractive, their faces are round and rather flat, their eyes are bright and their teeth extremely white and of a size that would appear too large only to that taste particular to Parisians. They wear their black hair long and fastened onto the top of their heads. I have seen some that sported long wispy moustaches. Like all Americans their skins are quite darkly tanned, this is the case with those living in the temperate or Glacial Zones as well those of the Torrid Zone.

Some of them have their cheeks painted red, their voices are soft and there is nothing about them that suggests they are in any way ferocious. Up until this time we have had no sight of their women, perhaps they will come sometime soon because the men always seem to want us to wait for something. They sent one of their brethren to a location about a league's distance away where a large fire had been lit and near to which, it seemed, their camp was situated; they indicated to us that someone from there was soon going to appear.

The clothing worn by these Patagonians is almost the same as that worn by the Indians of the River Plate area; that is to say, a sort of leather skirt covering their genitalia and a heavy coat made of the skins of guanaco or *sourillos*⁵⁷ which they fasten around their bodies with a belt, it coming down as far as their heels. It is their custom to allow the upper part of this garment to fall back over their shoulders; consequently and despite the severity of the climate they are almost always naked from the waist upwards. No doubt their way of life, living outside as they constantly do, has inured them against feeling the cold.

⁵⁷ The species of this animal has not been identified. -JFF

Although we had landed here in the middle of summer-time there had been only one day when the Reaumur thermometer had indicated a temperature greater than 10° above freezing. They wear a type of boot made from horse leather which is open at the back. Two or three amongst them wore a band of copper, about 2 inches broad, around the upper part of their calves. Some of our gentlemen noticed that two of the youngest amongst them were wearing necklaces made of seed pearls.

The only weapon we saw them carrying was a sort of bolas comprised of two round stones attached to the ends of a length of twisted animal intestine, such as is to be found in all parts of South America. They also have little knives, the blades of which are about 1½ to 2 inches broad. These knives, of English manufacture, were presumably given to them by Mr Byron. Their horses, small and painfully thin, are saddled and bridled in the same manner as those in the River Plate region. The saddle of the Patagonian is decorated with gilded nails, has wooden stirrups, onto which are applied thin sheets of copper; finally, a bridle of dressed leather completes their Spanish-style harness.

Their main food appears to be the marrow and flesh of guanacos and vicunas. Several of them had quarters of these animals attached to their horses and we saw some of them eat morsels of it raw. They also have about them small, vicious dogs; these animals drink water from the sea, as do their horses, as fresh-water is scarce along this coast; neither is it found abundantly inland.

None amongst them appears to have superiority over any of the others in the tribe; they seem to have no deference to either Gods or their elders, of which in this band were counted several. It is quite remarkable that several of them spoke the following Spanish words to us: *magnana*, *muchacho*, *bueno chico*, *capitan*. I believe that the people of this race lead a life similar to that of the Tartars. Men women and children alike, mounted on horseback wander incessantly following game or cattle, everywhere in abundance here, over the vast pampas of the South American countryside. There are other similarities to the Tartar nation; they use the skins of these animals both to clothe themselves and to cover their simple dwellings. They are disposed toward descending upon and to pillage the caravans of any travellers passing through their country.

I will end this article in saying that it was not until after we had left the Magellan Straits region that we found, in the Pacific islands, a nation whose people were taller than those of Patagonia.

Nature of the soil in this part of the Americas.

The ground where we made our landing was very dry and in many ways resembled the earth found in the Falkland Islands as did the plants found growing here by our botanists. The coastline has the same species of seaweeds and the rocks are covered with the same types of molluscs. There is no timber here with the exception of some low shrubs.

Remarks on the tide in this location.

When we moored in Boucault Bay the tide was just starting to turn against us and during the time we spent on shore here it was noticed that, while the tide was rising, the direction of the current was towards the east. This was a phenomenon upon which we often remarked and thus the stream direction could be reliably predicted; this was a phenomenon that had struck me during the course of my previous voyage.

At half past nine in the evening, upon the start of the ebb, the direction of the current reversed and now started to flow towards the west. We made soundings at high water and found we had 21 fathoms of water beneath us while, at the time we moored, we had only 18.

Second Anchorage in Boucault Bay.

On the 9th, at half past four in the morning, the wind being north-westerly, we left our mooring with all sails spread in order to make way against the tide; we steered South W $\frac{1}{4}$ West, but, we had gone no further than one league when the wind became very fresh and went round to the south-west. We let go anchor in 19 fathoms with a bottom of sand and mud mixed with rotten seashells. This unfavourable weather continued all day and for the duration of the following one. The little distance we had covered also carried us further away from the shore and for the duration of both these days had not it been possible to put a boat into the water. No doubt the Patagonians were just as put out as we were by these unpleasant conditions.

We could see a group of them still assembled in the place where we had landed and we believed that, with the telescope, we could just make out several huts that had been constructed there. However, it was my opinion that their main encampment was further away for men on horseback continually came and went. We greatly regretted being unable to take to them the things that we had promised to give them. Their happiness was gained easily and at so very little cost to us.

Observation of longitude.

The tidal range at this location was of only one fathom difference between high and low water. On the 10th we made an observation of the distance between the Moon and Regulus; Mr Verron calculated our westerly longitude at this mooring as $73^{\circ} 26' 15''$ and that of the eastern entrance of the second narrows as being $73^{\circ} 34' 30''$. The temperature, according to the Reaumur thermometer, had decreased, firstly from 9° to 8° and then down to 7° .

An anchor is lost.

On the 11th [December] at half past midnight the wind had gone round to the north-east, the current having been running towards the west during the past hour. I Made a Signal to the Etoile to weigh anchor. When we tried to lift our own anchor we found it to be fouled, all our best efforts, even going as far as to attach heavy lifting tackle to our cable, would not move it. At two o'clock in the morning the cable parted between the bit and the hawse-hole and consequently a valuable anchor was lost to us.

Passage through the second narrows.

We set our course with all sails spread, but, it was not very long before we were fighting against our old enemy the current. Even though the flow of water here was not as fast in the first narrows we found that the light, north-westerly wind was only just sufficiently strong to prevent us being pushed astern.

Anchorage close to St. Elizabeth Island.

At midday the ebb came to our assistance and we passed through the second narrows.⁵⁸ The winds, which had been variable until 3 hours after midday, then became South S Westerly to South S Easterly. With them came rain and violent squalls.⁵⁹ In two tacks we reached the anchorage to the north of St. Elizabeth Island where, in 7 fathoms of water on a seabed of grey sand with gravel and rotten seashells, we anchored 2 miles from the shore. The Etoile, moored a quarter of a league further towards the south-east, had a depth of 17 fathoms.

Description of this island.

The winds were still contrary and accompanied by violent squalls carrying rain and hail and gave us no alternative but to stay here for the whole of the 11th and 12th. On this last day we put one of the ship's boats in the water and went across to St Elizabeth Island⁶⁰ where we landed on the north-east side. The coastline of this island is elevated and everywhere slopes steeply towards the sea except at the south-west and the south-east points, where the land is low-lying.

It is possible; however, to make a landing almost anywhere because even at the steep parts there is a small beach at the foot of the slope. The island itself is very dry; the only water we found was in a small saltwater lake on the south-west side. We saw also several dryish areas of marshland where in places the ground was covered with a crust of salt. We saw Bustards sitting upon their eggs, but, they were few in number and so wary that we could not get close enough to shoot them.

The Patagonians must sometimes come to this island because we found a dead dog there and traces of fire and the shells left behind after one of their meals. There was no timber at all on this island; the only thing with which to make a fire was a species of small bush. We collected a supply of this shrubbery in case we were compelled to spend the night there, we would thus have been better provided with bedding than we would have been with food! Fortunately, as it turned out, the foul weather retained us here no later than nine o'clock that evening.

⁵⁸ The distance between the exit of the first narrows and the entry into the second, is perhaps 6 or 7 leagues and here the breadth of the strait is also about 7 leagues. The second narrows lies at an attitude North E ¼ East and South W ¼ West, its breadth is about a league and a half and it is between 3 and 4 leagues in length.

⁵⁹ when passing through the second narrows it is best to keep on the Patagonian side as the tide when one comes out of the narrows sets towards the south and one has to be aware of an outcrop which here lies below the point of St Georges Island and also, even though this lofty headland appears to be steep when it meets the sea, of a low-lying land that projects towards the West N West. - de B.

⁶⁰ St. Elizabeth Island lies at an attitude North N Easterly and South S Westerly with the western point of the second narrows pointing towards Patagonia. Both St. Bartholomew Island and Lions Island lie North N Easterly and South S Westerly between St. Elizabeth Island and the westernmost point of the second narrows on St. Georges Island. -de B.

(NOTE-St Georges Island is not marked on the chart provided by de Bougainville. I believe it is the island marked as Penguin Island which, in fact, is not an island at all. See the modern charts of the strait in Appendix 7.3 - JFF)

CHAPTER IX.

Our route from St. Elizabeth Island until we passed out of the Strait of Magellan. Including nautical observations during the passage.

Navigational difficulties in the vicinity of St. Elizabeth Island.

We were about to enter the wooded part of the Strait of Magellan having put the first of our difficulties already behind us. It was not until the afternoon of the 13th that the wind, coming then from the north-west, despite its violence made sailing on possible. We headed into the channel that separates St. Elizabeth Island from St. Bartholomew Island and Lions Island.⁶¹ we were obliged to maintain a spread of sail even though we were continually beset by strong gusts coming off the elevated land of St. Elizabeth Island in order keep close to its coastline; this was necessary to avoid the reefs projecting from the other two islands⁶².

The current in the channel was setting to the South and appeared to us to be very strong. Just below Black Cape we approached the shore in order that we might get our bearings. It is at this point that the coastline starts to become heavily wooded. The countryside in this locality, as far as we could see, was of very pleasant appearance. The coastline here tends towards the south and the tides run at a more moderate speed.

The wind was very fresh and gusting until six o'clock in the evening when it slackened enough to make for easy sailing. We followed the coastline at a distance of about a league under conditions of clear visibility and calm weather. We rashly assumed that we would be able to double Round Cape during the night and thus be sheltered under the lee of Port Famine before the onset of stormy weather. In this aspiration we were sorely disappointed. Half an hour after midnight the wind suddenly backed to the south-west and there descended around us a mist which obscured the coastline.

We were beset by continuous violent squalls bringing with them heavy rain and hail. Eventually, conditions became so dreadful that it was impossible to believe that the weather had, only a moment or two before, been so fine. Our main course, despite it having been brailled-up, had split. Such is the nature of the climate here; an interval of threatening weather suddenly occurs that is totally in contrast with the conditions preceding it and this with such rapidity that its arrival is impossible to predict. We were thus obliged to work our way ahead under only our fore-sail, main-stay-sail and close reefed top-sails in an attempt to double St. Anne's Point and put ourselves within the shelter of Famine Bay.

⁶¹ St. Bartholomew Island and Lions Island are linked together by a reef. There are also two other reefs, one to the South S West of Lions Island and another one or 2 leagues to the North N East of St. Bartholomew Island. These 3 reefs and the two islands stand in such a manner as to form a chain between which, to the East S East and St. Elizabeth Island and to the West N West lies the channel by which one must progress through the strait. This channel runs North N East and South S West. I don't know whether there is a passage to the South of St Bartholomew and Lions islands, nor if one exists between St. Elizabeth Island and the mainland. – de B.

⁶² The distance from the exit of the second narrows to the north-easterly point of St. Elizabeth Island is approximately 4 leagues. St. Elizabeth Island lies in an attitude South S West to North N East and has a length of approximately 3½ leagues. When taking passage through this channel it is good practice to follow the line of this island. From the south-westerly point of St. Elizabeth Island to Black Cape is a distance of hardly more than one league. – de B.

There remained a league to gain against the wind and whatever we did we made no headway. Our tacks were so short that we are obliged to wear and there was a strong current pushing us down towards a great bay on the coast of Tierra del Fuego. We lost three leagues in nine hours struggling along at this funeral pace. It became necessary for us to search along the coast for an anchorage where we would be sheltered from the wind.

We crept along the coast making soundings as we went and, just before eleven o'clock in the morning, we anchored in a bay a mile from the coast in $8\frac{1}{2}$ fathoms of water with a bottom of muddy sand. I named this place Duclos Bay⁶³ in honour of Mr Duclos Guyot, fire-ship captain, who was my second-in-command during this voyage and whose brilliance and experience have always been the greatest assistance to me.

Description of this Bay.

Duclos Bay is shallow and open towards the east; its northerly point projects a little further into the sea than does its southerly one, the distance, one from the other, is perhaps one league. There is good anchoring ground throughout the bay; within a cable's length of the coast a depth of 6 to 8 fathoms is found. It is a most excellent mooring since the winds from the west, being the predominant direction at this location, blow violently over the low-lying terrain.

Two rivers discharge into this bay their water is salty near their mouths, but, a hundred paces upstream it is of excellent quality. At the place where we landed the ground was predominantly sandy however, a little further into the hinterland the terrain became wooded. The countryside here appears to be totally lacking in fauna. We explored a considerable area of the ground hereabouts without seeing any animal other than a small number of snipe, teal, mallard, bustards and a few parakeets. All in all they were the types of animals that are inured against the cold.

Near the mouth of the more southerly of these two rivers we found 7 huts built in the shape of an oven and made from interlaced tree branches; they appeared to have been recently constructed. These dwellings contained a great number of the calcined shells of limpets and muscles.

We followed this river inland for a considerable distance and on our way we saw more evidence of human presence. During the time we spent on shore the sea level rose a foot and at the same time we observed that the current was flowing from the direction of the eastern ocean, this was exactly the opposite of what we had experienced since leaving Maiden's Cape. Prior to this, the depth of water had increased while the water was flowing out of the strait. However, it now appears to me after having made several other observations, that once one has passed the narrows where the strait runs north to south, the tides cease to be consistent. The great number of channels which cut into the land of Tierra del Fuego must cause a great irregularity in the movement of the waters.

During the two days we spent in this anchorage the temperature varied from 5° to 8° . On the 15th [December] at midday we made an observation; our latitude being $53^{\circ} 20'$. On that same day, it being too calm for us to set sail, we put the crew to work in cutting wood.

⁶³ From Black Cape, the coast follows a South S Easterly direction up to the most Southerly point of Duclos Bay, a distance of about 7 leagues. Opposite Duclos Bay there is a great bight formed in the Tierra del Fuego coastline. This, I suspect is a channel that comes out further to the East of Cape Horn. Cape Montmouth forms the most Southerly part of this bight. – de B.

Nautical observations.

As night time approached the clouds started to move across the sky towards the east so predicting the coming of a more favourable wind. We shortened in cable and, as we had expected, on the 16th at four o'clock in the morning the breeze started blowing from the direction we had hoped for and we set sail. In truth, the sky was completely overcast and, as is frequently the case in this part of the world, the east and north-easterly winds brought mist and rain with them.

We went past St. Anne's Point and Round Cape. The former of the two has level land of only medium height surrounding it. The bay here is deep and the anchorage convenient with good holding ground. We assumed this to be location where Sarmiento⁶⁴ had tried to establish the colony of Phillipville and where the unhappy fate of it's would be founders has since caused it to be known as Port Famine. Round Cape is of an elevated aspect and remarkable for its shape from which it takes its name. The coastal area everywhere hereabouts is wooded and steeply sloping while the land on the Tierra del Fuego side appears to be cut into by several straits which are of fearful appearance. The mountains here are covered with snow of a blue colour that appears to be as old as the world. Between Round Cape and Cape Froward⁶⁵ there are four bays within each of which it is possible to anchor.

Description of a remarkable Cape.

Two of these bays are separated by a cape; its remarkable appearance immediately attracted our attention and merits a detailed description. The cape rises to a height of more than 150 feet above sea level and is entirely composed of horizontal strata of fossilised sea shells. At the foot of this monument, attesting the enormous changes that have befallen our planet over time, I took soundings from the ships boat and did not find bottom with a line of 100 fathoms.

The wind being favourable took us to within a league and a half of Cape Froward following which a calm of two hours duration ensued. I took advantage of this time to launch the ships boat in order to make a survey and take bearings and soundings in the vicinity of Cape Froward.

Description of Cape Froward.

This Cape is the most Southerly point of America and also of all the known continents. We were able to make good observations here by which we determined its latitude to be 54° 5' 45" South. The cape consists of two headlands about three quarters of a league apart of which the eastern headland is more elevated than is the western one. The sea at the cape itself is extremely deep but, between the two headlands one can anchor in 15 fathoms on a seabed of sand and gravel in a shallow bay into which there flows a quite large stream.

This mooring is dangerous when the wind is from the south and it is better not to anchor here except in case of absolute necessity. The entire Cape consists of steeply sloping native rock, its highest point being completely snow covered. There are, nevertheless, a few trees growing here their roots penetrating into the rock fissures where they are nourished by the eternal humidity.

⁶⁴ Pedro Sarmiento Gamboa 1532-92, Spanish explorer, astronomer and mathematician. -JFF

⁶⁵ This cape is referred to by Bougainville throughout his journal as Cap Forward. However, on some Bougainville's own charts and on British Admiralty charts it is called Cape Froward. I assume "Forward" is an error and have opted for "Froward". -JFF.

We made our landing beneath the cape at a small rocky point upon which we found hardly enough room for 4 persons to stand. This point is the termination or the beginning, depending upon how you look at it, of this vast continent. We hoisted our boat's flag and there, for the first time in this wild location, its rocks rang out with the joyous sound of our cries - "God save the King!"⁶⁶ We could see Cape Holland bearing West 4° North and from this point the coastline started to incline away towards the north.

Anchorage in French Bay.

We returned on board at six o'clock in the evening and soon after, the wind having gone round to the south-west, we began to look for an anchorage in the bay; Mr Gennes had called French Bay (*Baie Françoise*). At half past eight in evening we cast our anchor in 10 fathoms on a bottom of sand and gravel. One of the two points of this bay bears North N East ¼ East 5° North and the other South 5° West, the small island in the middle of it bore north-east.

We had need to take water on board and to gather wood before starting across the Pacific Ocean and, as that part of the strait to the west of us was unknown to me (because until that time I had never sailed further west than French Bay), I decided that we would replenish our provisions here. This decision was based on the fact that Mr Gennes had clearly stated this to be a certain and convenient place to do so.

That same evening, with this objective in mind, we put all our boats into the water. During the night the wind made a complete circuit of the compass, frequently gusting violently. The sea became very rough and was breaking all around us on a bank that seemed to go around the entire circumference of the bay.

The frequently changes of wind direction caused the ship to swing constantly around and we became concerned lest our cable should become foul on our anchor. As a consequence, being ever fearful of this possibility, we passed here a most miserable night. But, the Etoile, who had moored further out in the bay, suffered far less than we did. At half past two in the morning I sent the smaller of the ship's boats to take soundings in the entrance of the river to which Mr Gennes had given his name.

It was low tide and the boat grounded on a bank at the river's mouth, thus making us aware that access to the river by boat would only be possible around the time of high water. The consequence of this was that our boats would barely have the time to make more than one trip a day. This difficulty in watering ship combined with the fact that the anchorage here is less than ideal caused me to consider relocating the vessels into a small bay a league further to the east of our present position. Here, in 1765, I had been able to cut sufficient timber for my journey back to the Falkland Islands without any difficulty.

In this bay, to which the crew of the ship had given my own name; my first need was to ascertain it was a suitable location where the crews of two ships would be able, without difficulty, to take on sufficient water. I discovered that, in addition to the stream that flowing into the broadest part of this bay (which we subsequently reserved for our daily ablutions), there was, in each of the two neighbouring bays, a stream adequate to provide all the water we could possibly use. These streams had an added benefit in that we did not have to travel half a mile to reach them. On the strength of this, at 2 o'clock in the afternoon on the 17th [December], we sailed under top-sails and our mizzen stay-sail.

⁶⁶ See Appendix 7.2 - JFF

We passed on the seaward side of the island in the middle of French Bay and we entered into a very narrow inlet. However, the water was deep between the most northerly point of this bay and an elevated island about 1/8 of a league in length. This inlet leads to the entrance of Bougainville Bay and is further enclosed by two small islets the larger of which is called Observatory Island.⁶⁷ The bay is 200 fathoms wide and has a breadth of 50 fathoms. It is surrounded by high mountains and thus protected against winds from all directions. The sea within the bay is as flat as a millpond at all times.

The Anchorage in Bougainville Bay.

We moored in the entrance to the bay at three o'clock in 28 fathoms of water and we immediately sent hawsers ashore to provide means for heaving us into the main part of the bay. The Etoile, who had set her anchor further out and in much deeper water, started drifting towards Observatory Island. Before she had time to take in the slack in the hawsers that had been taken on shore (to prevent her stern swinging), she came within a few feet of striking the island; paradoxically, at this point, she still had 30 fathoms of water beneath her keel. The north-eastern side of this island is not as steep. The rest of the day we spent in mooring the ships, the bows facing out to sea with an anchor ahead of us set in 23 fathoms on sandy-mud and a kedge anchor astern almost on the shore. We fixed two hawsers to the trees on our port side and two others aboard the Etoile who had moored in a similar manner to us. Close to the stream we found two huts made of the branches of trees, they appeared to us to have been abandoned a long time ago.

At this same place, in the year 1765, I had constructed a hut from bark into which I had left some gifts for whatever natives chanced to come this way. Above the hut I had set a white flag. The hut had been destroyed and the presents and the flag had been taken away.

Stopover in this bay to water ship and cut wood.

On the morning of the 18th⁶⁸ I set up a camp on the shore to house the party whose job it would be to protect the workers and in which to store those items that would be needed for the work. We also landed all our water butts for them to be overhauled and fumigated with sulphur. We set up washing facilities around the pools for the people charged with laundering. We hauled the ships boat up onto the beach as she was in need of repair. We spent the remainder of the month of December in this bay and found it to be very convenient for cutting fire-wood and even for making planks.

Everything there made our work easy; there were good pathways through the forest and there were more trees already felled than we could possibly make use of. This timber was a legacy and a gift, the result of the work performed here by the crew of the Eagle in 1765.

While we were in this bay we boot-topped ⁶⁹ and mounted 18 cannon. The Etoile had also been fortunate in that she had been able to cure the leak which, ever since we had left Montevideo, had caused her to take in just as much water as she had done prior to the careening we had carried out in Ensenada.

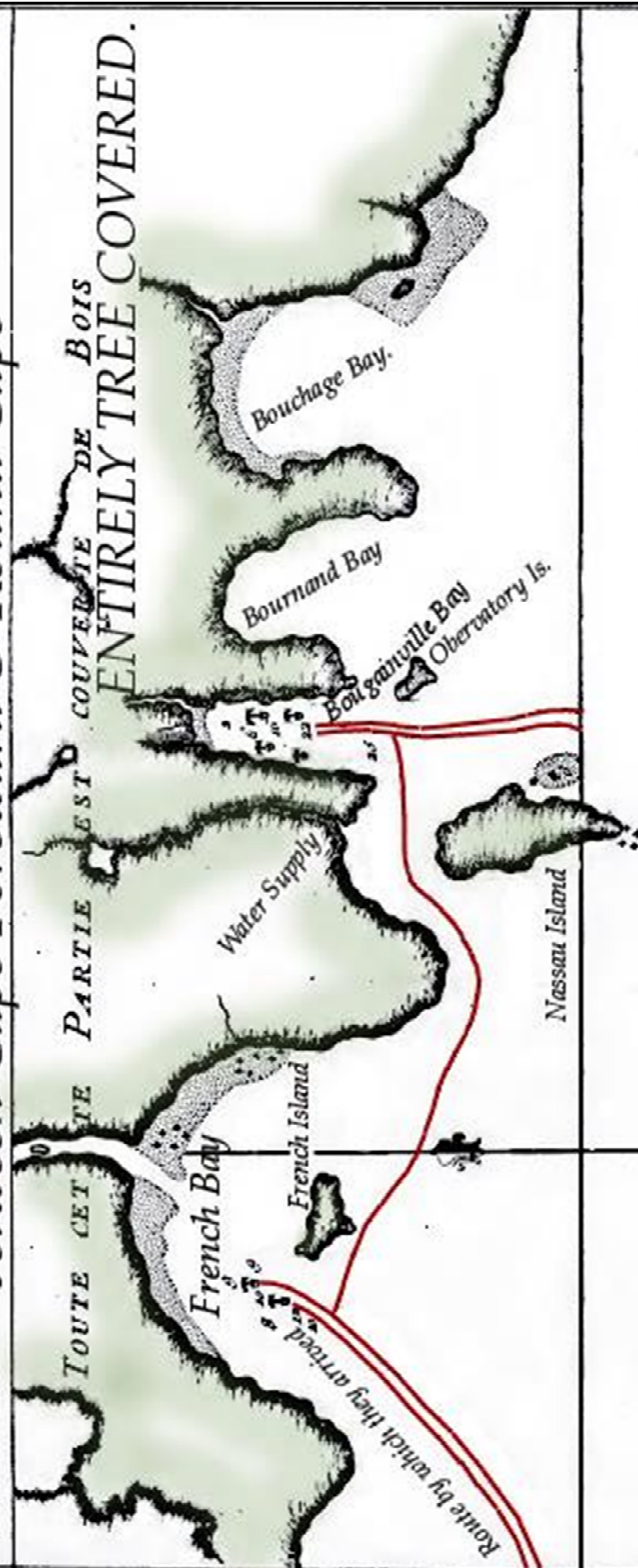
⁶⁷ The distance from Round Cape to Observatory Island is 4 leagues and the coastline here lies in an attitude of West S West. Between these two points there are 3 good anchorages.- de B.

⁶⁸ In the original document is written "the 8th", an obvious error - JFF

⁶⁹ Boot-topping is the act of cleaning the upper part of the ships bottom and daubing it with a mixture of tallow, sulphur and resin etc. Boot-topping is performed where no dock is available.-(Falconers marine dictionary).-JFF

She had been trimmed so as to raise her bows high out of the water and then, having removed some of her sheathing, it was discovered that the water was entering via a void at the join between the two components of her stem-post. The successful repair of this defect proved a great boon to the crew of the store-ship during the remainder of the voyage; they having been brought close to total exhaustion by the constant requirement to man the pumps.

Geometric Chart of bays in the Magellan Strait between Cape Foreward & Round Cape



Scale 600 fathoms (Toise)



Astronomical and metrological observations.

From the very first day that we have arrived at this location Mr Verron had established his instruments on the islet we had named "The Observatory". Unfortunately, most of the nights spent there were fruitless, for the sky in this part of the world is largely unsuitable for astronomy and no observations of latitude at all had been possible.

Mr Verron had only been able to determine, from three observations made using the quadrant, the southerly latitude of the islet as being 53° 50' 25" south. He also established the movement of the tide at the entrance to the bay with reference to the conditions at 00^h 59'; at no time did the water level rise more than 10 feet.

During the time we spent here the thermometer indicated an average temperature varying between 8° and 9°. The lowest and highest temperatures recorded were 5° and 12½° respectively. The sun then appeared out of a cloudless sky and its rays, so infrequently seen in this location, melted some of the snow on the mainland mountains.

Mr de Commerçon, accompanied by the Prince of Nassau, profited from this unseasonably good weather to collect plants. He was often obliged to overcome obstacles but, if only in his eyes, this hostile terrain offered some recompense for the Strait of Magellan enriched his sample boxes with a great number of plants that were both interesting and previously unknown. Our attempts to catch fish and game were, however, not so fruitful, in fact we caught nothing at all! The only quadruped we saw here was a fox that the men working ashore had killed; it was almost identical to those that live in Europe.

We made several exploratory expeditions to reconnoitre the coastline of both the mainland and Tierra del Fuego. Our first attempt was without success; I had set out on the 22nd at three o'clock in the morning with Messrs' Bournand and de Bouchard with the intention of going as far as Cape Holland in order to investigate what anchorages were to be found in that location. At the time that we set out the sea was perfectly calm and we enjoyed the most beautiful weather that could have been wished for. An hour later a light breeze from the north-west sprang up and, immediately afterwards, the wind went round to the south-west and it started blowing a full gale.

For three hours we struggled against it, sailing as best we could in the lee of the coastline. In this fashion and with great difficulty we reached the mouth of another little river flowing out into a small sandy cove within the shelter of the eastern headland of Cape Froward. We decided that we would remain here for a while as we expected the severe weather would be only of short duration. This was a false hope resulting in us becoming soaked through and frozen to the bone by the bitter cold.

In order to avoid having to pass the night in the open air we constructed a small cabin from tree branches. Such structures are the palaces of the native inhabitants of the countryside; unfortunately we did not possess their hardiness or their familiarity with living in them. The cold and the humidity soon caused us to flee from our temporary shelter and we were obliged to huddle around a great fire that we took great pains to feed with an abundant supply of fuel. We protected ourselves against the rain and wind as best we could by setting up the sail of our boat.

We spent a most dreadful night; the wind and the rain becoming more and more severe with every hour that passed. When morning finally dawned we decided there was no alternative but for us to return to the ship. We arrived back at the frigate at eight o'clock in the morning and were happy beyond words having finally found shelter from the awful weather. Our sense of relief very soon became even more keenly felt for later that day the weather deteriorated even further. Had we

delayed our return any longer it would have been impossible for us to undertake the journey back to the ship.

For the next two days a full storm raged about us and the mountains all around became covered in snow; this in spite of the fact that we were in the very middle of summer, a time when the sun remains above the horizon for more than 18 hours every day.

Reconnaissance made at several of the harbours on Tierra del Fuego.⁷⁰

A few days after the unhappy experience referred to above I undertook, with greater success, a plan to visit an area of Tierra del Fuego with the purpose of locating a suitable port on the opposite side of the strait from Cape Froward. It was my intention then to re-cross the strait and go as far as Cape Holland in order to survey the coast between there and French Bay. This was an objective, during our previous expedition that we had been unable to fulfil.

I armed the cutter of the *Boudeuse* and the *Etoile's* barge with rifles and swivel guns and on the 27th [December] at four o'clock in the morning we left the frigate accompanied by Messrs' Bournand, d'Oraison and the Prince of Nassau. We set sail from the westerly side of French Bay in order to cross the strait to Tierra del Fuego. We made our landing there at 10 o'clock close to the mouth of a small river which flows out into a sandy cove. It was a location where the landing was bad, even for boats as small as ours. However, when circumstances make it unavoidable, shelter is to be found here by entering into the river at high water.

We ate our meal on the banks of the river where an attractive the shade of a little wood made a refuge for several native huts. From this position we took a bearing to the point on the west side of French Bay making it North W ¼ West 5° West at a distance that we estimated to be 5 leagues.

In the afternoon we set off once more under oars along the coast of Tierra del Fuego. Even though there was only a light wind blowing from the west a heavy swell was running. We went past a great opening in the coastline the end of which we could not see. Its mouth, being about 2 leagues wide, is separated at its centre by a small, high island. The great quantity of whales that we saw in this location and the heavy swell running there caused us to believe this might be a strait and that possibly it led to the sea, quite close to Cape Horn.

We meet aborigines.

After we had passed to the other side of the strait we saw several fires, first lit and then become extinguished; a little later on these fires remained burning and we could see savages at the low point of the bay where I had decided to make a landing. We made our way towards the location of the fires where and I recognised that these were the same savages I had seen previously during my earlier voyage into the strait.

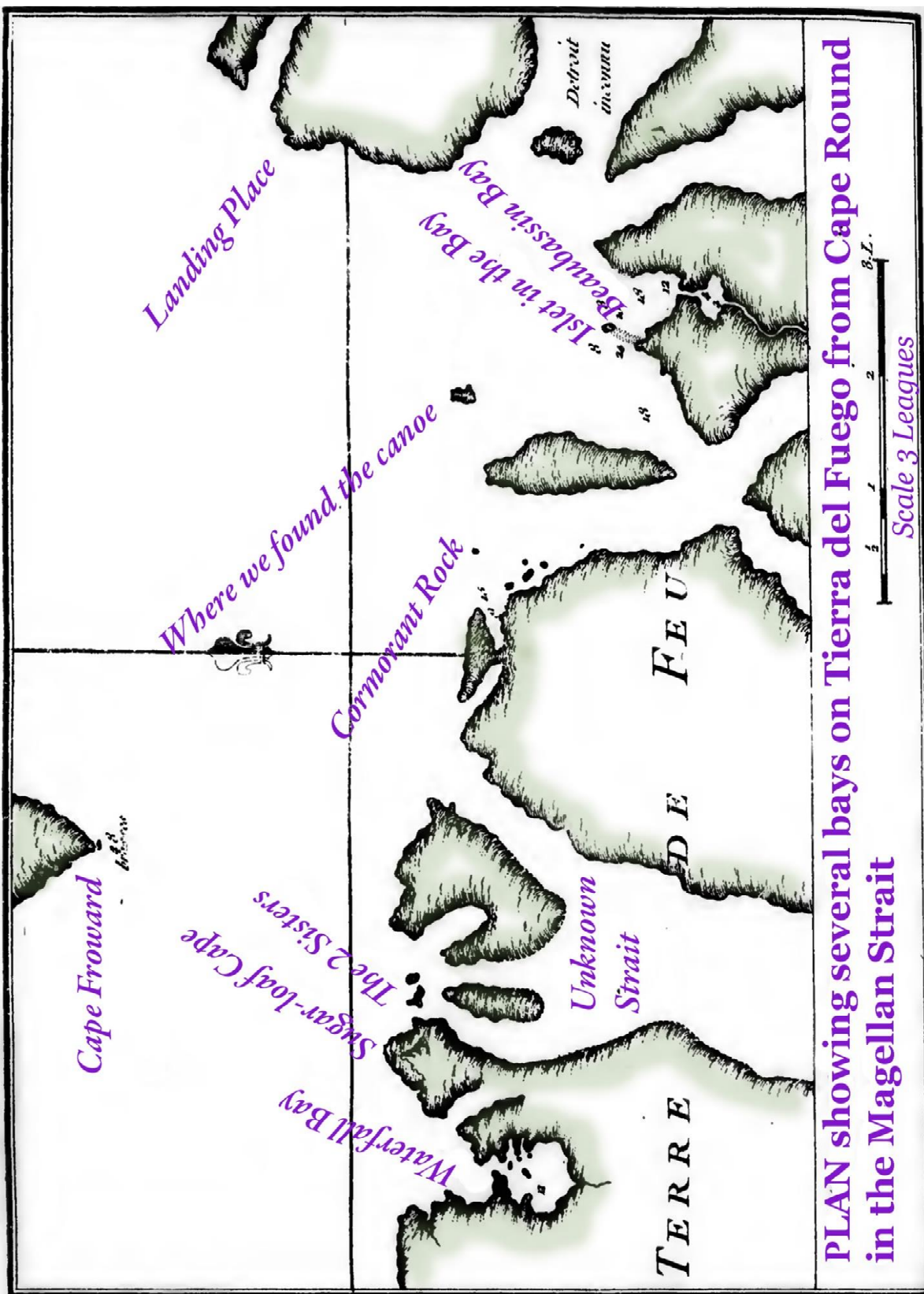
On that occasion we had given them the name *Pécherails*, because that was the very first word they pronounced on approaching us. They repeated it constantly, in much the same manner as the Patagonians had repeated the word *chaoua*. For this same reason we decided to call them by the name *Pécherails* on this occasion also.

⁷⁰ See the map of Magellan Bays on page 92 for the location of this landing. - JFF

I have, a little later on in this journal, taken the opportunity to describe the inhabitants of the wooded part of the strait. On this occasion, the day then drawing to a close, we were unable to spend very long with them.

They were a group numbering approximately 40 souls; men, women and children. They had with them 10 or 12 canoes which were lying in an adjacent cove. We left them and went across the bay where we entered into an opening in the coastline.

Night-time having by now fully descended upon us, we were unable to make an immediate detailed examination of our surroundings. We passed the night on the banks of a river of some considerable breadth. We lit a great fire and by using the sails of our boats, which were of a goodly size, we constructed tents. Although it was bitterly cold we were fortunate in that the weather was otherwise very kind to us.



PLAN showing several bays on Tierra del Fuego from Cape Round in the Magellan Strait

Description of the bay and harbour called Beaubassin.

In the morning of the next day we could see that this opening was in fact a real harbour. We took soundings within the harbour proper and in the outer bay as well. The bay itself provides a very good anchorage, it has water depths varying from 12 to 40 fathoms on a bottom of sandy fine gravel mixed with shells. In this haven ships are sheltered from dangerous winds in every direction. Its easterly point is easily recognisable as it has upon it a very large hillock to which we gave the name the Dome. On the Western side there is a small island but ships are unable to pass between it and the coastline. The entrance into the bay is via a very tight narrows with water depths of 10, 8, 6, 5 and 4 fathoms. It is best to keep to the centre or tend toward the east side where the water is deeper.

The beauty of this location inspired us to name it the Bay and Harbour of Beaubassin. On occasions when ships are delayed, waiting for favourable winds, it is most convenient to anchor in this bay.

Ships requiring water, needing to cut wood or even to careen ship; could hardly wish for a more suitable place than the harbour of Beaubassin.

I left the Chevalier de Bournand behind here; he was in command of the yawl and had orders to make a thoroughly detailed survey of this important location before returning to the ship. I then embarked in the Etoile's barge with Mr Landais, one of the store-ship's officers, in command. In this vessel I continued my exploration of the strait. We set a course towards the west where we first visited an island and later sailed right around it. We found that it was possible to moor anywhere in the vicinity of this island; the depth at this anchorage being 25, 21 and 18 fathoms on a seabed of sand and fine gravel. On this island we saw people who were engaged in fishing. We continued our way along the coastline and before sunset we came to another bay which offered excellent mooring for 3 or 4 ships.

Cormorant Bay.

I named this place Cormorant Bay (*Baie de la Cormorandier*)⁷¹ on account of a rock standing out of the water which is about a mile away in an East S Easterly direction. In the entrance to this bay there is a depth of 15 fathoms and, within the mooring itself, between 8 and 9 fathoms. We passed the following night at this location.

On the 29th [December], as day was breaking, we made our exit from Cormorant Bay and made our way westward with the assistance of a strong and favourable current. We passed between 2 islands that were greatly different in size; I named them the Two Sisters. They lie on a bearing North N East & South S West from the centre line of Cape Froward at a distance of about 3 leagues. A little further on we saw a mountain of very distinctive shape and, being so easy to recognise, we gave it the name Sugar-Loaf Mountain.

Waterfall Bay and Waterfall harbour.

This mountain bears North N East and South S West from the most northerly point of the cape which bears the same name and is at a distance of about 5 leagues from Cormorant Bay. Here we discovered another beautiful bay with a superb harbour in its most sheltered part.

⁷¹ Perhaps because it reminded him of the sort of rock upon which cormorants typically perch. Bougainville may have meant this to be interpreted as something like "Place where cormorants do what cormorants do".- JFF

Within the port itself there is a remarkable waterfall and, consequently, I named this place Waterfall Bay and the harbour within it Waterfall Harbour. The centre of this bay bears north-east and south-west from Cape Froward. The security and convenience of this anchorage and the ease with which wood and water may be obtained leaves nothing for the mariner to desire.

Description of the countryside.

The waterfall is formed by the waters of a small river which snakes down between the slopes of several high mountains. At the waterfall there is a drop of between 50 and 60 fathoms and I made the climb to the high point from which the water begins its descent.

The landscape here is a mixture of small spinnies and little open spaces covered with short spongy moss. In this location, although we searched carefully for it, there was no trace of human habitation. The inhabitants of this region never move very far away from the sea; it is the source of everything necessary for their subsistence.

Concerning other features of the land hereabouts; this entire section of the land of Tierra del Fuego, from St Elizabeth Island, appears to be nothing more than one continuous chain of islands; some are big, some small, some low-lying and some so elevated that the tops of the mountains on them are at all times covered in a layer of snow. I am in no doubt that between these islands there are many passages leading to the open sea. The trees and plants growing here are identical to those seen on the coast of Patagonia and, except for the trees; the place has very much the same look about it as do the Falkland Islands.

Benefits that might be obtained at the three harbours previously described.

I have inserted at this point the chart that I made showing some details at this interesting part of the Tierra del Fuego coastline. Up until the present time no anchorage had been known on this part of the coast and ships were careful to avoid it. The discovery of the three harbours, I have already described, will make the passage of this section of the Magellan Strait safer and much more easily accomplished. The area around Cape Froward has always been a location dreaded by navigators. It is more often than not the case that violent and contrary winds prevent vessels doubling this cape. These, all too frequently prevailing conditions, often compel ships to go back to as far as Famine Bay. However, from now on the winds that prevail here can be turned to one's advantage. It is only a matter of keeping as close as possible to the coast of Tierra del Fuego until one reaches one of the three anchorages described above. This can almost always be accomplished by beating to windward in one of the channels where the sea conditions are generally quite moderate. From then on, in order to reach Port Gallant, all the boards are advantageous; particularly so if one chooses one's time of departure so as to benefit from favourable tidal conditions.

We spent one very uncomfortable night in Waterfall Bay, it was bitterly cold there and it rained continuously. These unpleasant conditions lasted for almost the entire day of the 30th.

At five o'clock in the morning we made our way out of this harbour and started to cross the strait under sail. The wind was very strong causing an extremely agitated sea; the conditions were, in reality, far too severe for our frail little vessel. We were able to identify Cape Froward and made our landfall at a point approximately halfway between it and Cape Holland. Thus, being no longer uncertain of our position and, with the wind still at our stern, we felt more at ease as we made our way parallel to the shoreline.

It was necessary, nonetheless, to be prepared for the frequently occurring violent squalls and to have the sheets and halyards always in hand. The same situation applied as we were crossing French Bay where, on one occasion, a carelessly applied rudder movement almost caused our boat to capsize. Finally, at about 10 o'clock in the morning, we arrived back at the frigate. While I had been away Mr Duclos Goyot had re-embarked all the materials that had been taken ashore and had started making preparations for sailing. That same afternoon we started to un-moor the ships.

Departure from Bougainville Bay.

At four o'clock in the morning on the 31st the work of un-mooring the ships had been completed. By six o'clock we were being towed out of the bay by our ships boats under oars. The weather was calm, but, by seven o'clock a north-easterly breeze had sprung up which freshened as the day wore on. Visibility remained good until noon when it grew misty and rain started to fall. By half past eleven we were in mid-channel, from there we took bearings on: the waterfall to the south-east, Sugarloaf Mountain to the East S East 5° South, Cape Froward⁷² to the East ¼ N-East and Cape Holland⁷³ to the West N West.

During the period from noon until six o'clock that evening we made our way round Cape Holland. There was but little wind, as the breeze had dropped off during the evening; the sky was, however, heavily overcast and I decided to moor in the outlying part of Gallant Harbour. We anchored there at 10 o'clock in 16 fathoms of water on a bottom of gravel, sand and broken coral.

Anchorage in Fortescue Bay.

Cape Gallant⁷⁴ was bearing to the South E 3° West and we congratulated ourselves upon having found an excellent anchorage in which to pass the night. During the hours we spent here we were subjected to continuous rain driven by a strong wind from the south-west.

1768. January.

We started the year 1768 in Fortescue Bay; it is the bay in which Gallant Harbour⁷⁵ is located. The layout of this bay and its harbour is shown very accurately on the chart drawn by Mr de Gennes. We had ample time to confirm this chart's accuracy because we were weather-bound here for 3 weeks.

⁷² From Observatory Island to as far as Cape Froward is a distance of about 6 leagues; the coast here runs approximately West S West. The strait at this location is between 3 and 4 leagues wide. – de B.

⁷³ Within the distance of 5 leagues (approximately) separating Cape Froward from Cape Holland there are 2 other capes and 3 shallow coves. I am unaware of any anchorage in this location. The breadth of the strait here varies between 3 and 3½ leagues. – de B.

⁷⁴ The coastline between Cape Holland and Cape Gallant runs East 2° South and West 2° North; the distance between the two capes is about 8 leagues. Between these two there is another, Cape Coventry, which is less pronounced. There are also several bays in this location; the only one of them that is of any significance is called Green Bay or Descardes Bay, where we made a visit ashore. This bay is quite large and deep but there appears to be some obstructions on the seabed. – de B.

⁷⁵ Fortescue Bay has an extent, from one point to the other, of about 2 miles and a little less in breadth; there is a peninsula on the west side of the bay which extends in an East S Easterly direction giving shelter to the harbour from winds of any direction. Port Gallant is formed by this peninsula and it has a West N Westerly depth of about a mile and a breadth of 4 to 5 hundred paces. There is a river flowing into the back of the harbour and two other rivers outfall at the harbour's north-east coast. In the middle of the harbour there is 4 to 5 fathoms of water with a bottom of mud and seashells. – de B.

During this time we suffered the most dreadful weather imaginable; the like of which nothing that ever occurs in Paris could ever give the slightest impression.

An account of the dreadful conditions to which we were subjected.

I believe it would be of interest to my readers if I were to share with them the disagreeable conditions we were subjected to by the tempestuous weather conditions that prevailed during our stay Gallant Harbour.

My most important objective at this location was to explore the coast up as far as Elizabeth Bay, including the multitude of small islands; of which there are a great number in this part of the strait. From our anchorage we could see two of these islands; these had been named, by Narborough,⁷⁶ Charles Island and Montmouth Island. To the island furthest to the west he gave the name Rupert Island. To those that were the furthest away of all, the name Royal Islands. The winds from the West prevented us from setting sail and so to increase the security of our mooring I put out one of our kedges and a second anchor.

We found evidence which indicated Englishmen had been here.

The driving rain did not prevent us from going on shore and here we saw signs that an English vessel had been here previously. We found wood that had been freshly sawn and riven, the bark of several laurel bushes that had recently been lifted, a wooden tally (of the sort that naval dockyards attach to bolts of sailcloth etc.); upon one of these could clearly be read: "Chatham March 1766". Also, carved into the trunks of several trees, were the initial letters of names with the date 1767.

Astronomical and nautical observations.

Mr Verron had brought his instruments ashore and had set them up on a peninsular which partially closes the entrance to the harbour. Here he made observations at noon with the quadrant and found our latitude to be 53° 40' 41" south. This observation and the bearing from here to Cape Holland, taken in conjunction with the bearing we had taken of Cape Holland on 16 December from Cape Froward, enabled us to calculate the distance of Port Gallant from Cape Froward as being 12 leagues. Here, likewise, he observed with the azimuth-compass the declination of the needle as 22° 30' 32" north-east and its inclination from the elevation of the pole as 11° 11'. These are the only observations he was able to make during a period of almost an entire month.

During the time that we spent here the weather conditions at night were as atrocious as they were during the day. Had the weather conditions permitted there would have been an excellent opportunity, on 3 January, to determine the longitude of this bay by means of an eclipse of the moon which occurred at half past ten in the evening. Unfortunately the rain, which had been continuous for the whole day, continued in torrents for the entire night.

On the following 4th and 5th of January the weather became more dreadful yet; it rained, it snowed and it was bitterly cold with a raging wind tearing continuously about us. It was, it seemed to me,

⁷⁶ Rear Admiral Sir John Narborough (c. 1640–1688) was an English naval commander of the 17th century. He served with distinction during the Anglo-Dutch wars and against the pirates of the Barbary Coast.

what the Psalmist was referring to when he quoted the words: *nix, glando, glacies, spiritus procellarum*.⁷⁷ On the 3rd of January I sent one of the ships boats to try to find a suitable mooring on the Tierra del Fuego side of the strait. They by good fortune found an excellent one to the south-west of Charles and Montmouth islands. Their secondary task had been to record the direction of the current when the tides were ebbing and flowing. It was my intention to take advantage of the tidal stream, in conjunction with our knowledge of the anchorages on the south and north sides, to set sail even though the wind was against me. Unfortunately, as it turned out, the strength of that wind made this course of action impossible.

Nonetheless, during the entire time that we spend here we had carefully observed the direction of the current in this part of the strait and concluded it to be the same as it had been in the narrows, that is to say, that the rising tide flows to the East and that the ebbing tide flows to the West.

A description of the people we met, known to us as “the Pecherais”⁷⁸.

On the afternoon of 6th January there was a short period during when the weather improved slightly; the wind even appeared to be coming from the south-east; accordingly, we recovered our kedge anchor. Unfortunately, at the moment we were ready to set sail, the wind went round again and it became squally from the West N West and so we were obliged to hastily reset our kedge anchor. That same day we received a visit from some of the local inhabitants.

In the morning four canoes had appeared around the point of Cape Gallant where they remained for a short while. Then, three of them came into the main part of the bay whilst the forth canoe sailed towards our frigate. After having stood off, seemingly undecided for about half an hour, it eventually came alongside us. Its arrival was again accompanied by repeated cries of “*Pecherais*”.

In this canoe there was a man and woman and two children. The woman remained on guard in the canoe while the men climbed jovially and confidently aboard. Later the other canoes followed the example of the first one and the men came into the frigate with their children. Within moments they had become completely relaxed in our presence. They sang and danced for us while listening to the sound of the instruments we played for them. But, most particularly they ate; everything we gave them they bolted down with great relish, their appetites were truly prodigious. To them everything was good - bread, salted meat, fat; they devoured everything that was given to them. In fact we had great difficulty getting rid of these disgusting and inconvenient guests. The only way that we could get them to return to their canoes was to lower into them some morsels of salted meat.

They did not appear to be the least bit surprised by the appearance of our ships; or indeed of any of the objects within them. Of the many and various things we showed them they displayed little curiosity.

There is no doubt in order to be surprised by the products of man's industry a man must already have acquired at least some elementary idea of the skills and arts they represent. These raw and uncivilised men treated and reacted to the products of modern science and industry in the same resigned way

⁷⁷ Quotation from “*ignis, grando, nix, glando, glacies, procellarum*”. – Fire, and hail, snow and vapours, ice, stormy wind fulfilling his word. (Psalm 148) -JFF.

⁷⁸ What Bougainville calls the Pecherais are the indigenous inhabitants of Tierra del Fuego now called the Fuegians, a group of several tribes thought by some to be of the same stock as the original inhabitants of Australia. See illustration in Appendix 7.5 -JFF
<http://en.wikipedia.org/wiki/Fuegians>

they accepted the laws of nature and all natural phenomena. During the several days that this group spent in the locality of Port Gallant we saw them often, both on board the ship and on the shore. These wild people are small, ugly and they have about them an unbearable smell. They go about almost naked, for they possess little in the way of clothing, nothing but dirty sealskins that are too small even to cover their bodies properly.

They also use skins to roof the huts in which they live and to make sails for their canoes. They possess, though in very small quantity, some skins of guanacos. Their wives are of hideous appearance and the men seem to have no affection for them whatsoever. It is the women who sail the canoes; they who take care of and maintain them. Despite the dreadful cold they will often swim out to where the canoes are moored; sometimes far from the shore amongst the seaweed that serves as their harbour, in order to bail out any water that may have seeped into them. On shore the women collect wood and seashells and, in the performance of these tasks, receive no help from the men. Even those women with children at the breast are not exempted from this arduous toil. While they work they carry their children on their backs wrapped in skins which serve as their only clothing. Their canoes are constructed from the bark of trees which is only crudely joined together; they employ rushes and moss to seal the seams. In the centre of each vessel there is a small hearth, formed with sand where a small fire is maintained at all times. Their weapons are bows which, like their arrows, are made from the wood of a spiny tree, common in the strait and which has leaves like those of a holly-bush. Their bow strings are made from animal gut and their arrows are tipped with skilfully napped pointed stones. These weapons are intended primarily for use against game rather than against enemies.

The bows are by no means powerful for the arms of the men destined draw them are as weak as the weapons themselves. Another weapon they use is made from fish-bone; it is about a foot long, sharpened at the end and serrated on both sides. Is this perhaps some sort of dagger? I think rather it is some sort of fishing implement for they used it like a harpoon, fixed on the end of a long pole.

The dwellings of these uncivilised people are totally chaotic. In the middle of each of their huts they maintain a fire; it is here men, women and their children settle themselves to find a place on the floor as best they can. Their main source of food is shellfish; however, they do have hunting dogs and also snares made from whalebone.

The teeth of every individual we met were in extremely bad condition; I believe the cause of this being the fact that they eat molluscs which, although still half raw when they put them into their mouths, are still scalding hot from the fire.

Notwithstanding all the great differences that set them apart from modern men, they appear to be good people: their frailty, however, frequently causes them to be considered as being an inferior race. We were able to ascertain that they were of a superstitious disposition and believed evil spirits.

In their society the men who retain the influence and control over the other members of the tribe are also those who act as their priests and doctors.

Of all the uncivilised people that I have ever seen in my life these, here in Patagonia, are the most benighted. They live in what can truly be called a state of nature.

If one has an inclination to pity men who, although their own masters, devoid of responsibilities and duties, but, are content with what they have, simply because they know no better; then this race of men is to be pitied.

They are deprived of everything that makes life pleasant and, in addition to this, they perpetually suffer every hardship the most dreadful climate in the universe can inflict upon them.

These Pecherai are, to their considerable detriment, members of the least numerous tribe that I have encountered anywhere in the world. Nevertheless, as will be demonstrated a little later, there are charlatans amongst them, as there are in every society. On occasions when there is an assembly which includes more than a single family; (by a single family I mean a man or woman and two children), the attitude and behaviour of the group becomes complicated. One individual or another takes it into his head that he will be the leader and endeavours to gain that dominant position, either by force or by deviousness.

When the new leader emerges and has become established, the family name of the successful dominant one is immediately changed to the collective name by which the tribe is known. Should this new hierarchy be adopted in some remote location, even the middle of a wood, and should its composition be no broader than an assembly of first cousins; a discerning eye would here detect the germ of all the vices displayed by all men who associate together in that form of organisation we call a nation.

Vices, which during the process of men becoming civilised, are given names; these being what cause great empires to come into existence, then to develop and ultimately to crumble away. In this same manner within societies, considering themselves to be civilised, virtues and standards also arise and are adopted. Moderating influences to which their brothers, still existing in a state of nature, are not susceptible.

The weather on the 7th and 8th [January] was so bad that it was impossible to deploy our boats in order to continue our exploration. Our anchor started to drag during the night and we were forced to set a sheet anchor. At times the snow on our decks accumulated to a depth of 4 inches and as day broke we could see that the land, with the exception of those low-lying parts where humidity prevented it, was completely snow-covered.

The thermometer generally showed the temperature to be 5° or 4°, but, at times it dropped to 2° below freezing point. By the afternoon of the 9th the weather had improved a little and we noted that the Pecherai were launching their boats in order to come aboard the ship. We saw also that they had made some effort to improve their appearance, that is to say, they had painted their bodies and faces with splashes of red and white pigment! However, when they saw our ship's boats leave the frigate and sail towards their huts on the shore they began to follow them. The one remaining canoe continued its way towards the Etoile, but, remained alongside her for only a short time. It then went over to join the others who had already met up with our gentlemen and with whom they were already on the friendliest of terms.

Their women had by this time drawn away from the men and had all gone in to one of the huts. When some of our men moved as if they intended entering this hut they became quite agitated; they made it clear they wanted us to go instead to some other huts. Here they offered our gentlemen some mussels, however, prior to having presented them to us they placed them in their own mouths and sucked them. We gave them some small presents which they accepted with much pleasure. They sang and danced and exhibited a degree of gaiety far in excess of what one might have expected of people living in such a state of barbarism and, furthermore, whose demeanour, it had been past my experience to note, was generally one of great seriousness.

One of them has an unfortunate accident.

Sadly their happiness was not of long duration; one of their children who was about 12 years old suddenly started to bleed from the mouth and to writhe painfully about in violent convulsions. Of all the members of their tribe he was the only one, in our eyes, who possessed an interesting face. This unfortunate child had been on board the Etoile where he had been given, in total unawareness of the dreadful consequences that would ensue, some fragments of glass and pieces of a mirror. We later learned that these people have the habit of inserting small pieces of talc into their throats and nostrils. It may well be that they consider this practice to be some sort of a good luck charm; a talisman perhaps to protect them from some harm or other befalling them.

This child had attempted to put these bits of glass to the same use. His lips had been cut, as had his gums; his palate had been gouged in several places and he bled copiously and continuously.

This accident caused consternation amongst them and they became very suspicious of us. They clearly suspected that we had some evil intention towards them. The first action of their medicine man, who had immediately taken up the child, was to remove a jacket made of sailcloth that we had given to him. It was obvious that he wanted to return the jacket to us and when we refused to take back it he threw it at our feet. Another of them, who obviously prized the jacket more than he feared any enchantments it might contain, immediately picked it up and claimed it as his own.

The medicine man first laid the child on its back in one of the cabins then, having knelt down between the child's legs, he leaned over him and using his head and both his hands, pressed the child's stomach with all his strength while continually shouting out loud and incoherent cries.

From time to time he stood up holding his hands in a fashion to give the impression that they held the ill causing the child's affliction; then, quickly opening his hands, he blew into them as if to cast away some evil spirit. While this ceremony was in progress an old woman with tears streaming down her face started screaming, loud enough to deafen him, directly into the child's ear.

The unfortunate child seemed to be suffering as much from the remedy being applied as he was from his injuries. The medicine man then went away to get dressed into his ceremonial garments and for a while the child was spared his administrations. When the medicine man came back his head had been powdered and two wings had been affixed giving it the appearance of the hat worn by the god Mercury. He immediately and confidently resumed his treatment which continued with the same total lack of success. The child in fact appeared to have deteriorated considerably and to such an extent that our padre surreptitiously baptised him.

When those officers who had been present returned on board they informed me of what had occurred on shore. I immediately went there myself taking with me Mr de la Porte, our senior surgeon, who had prepared some milk and a soothing infusion.

By the time we arrived at the scene the injured child was outside the cabin. The medicine man had, by this time, been joined by another magician dressed up in the same sort of costume. He had restarted his administrations on the child's stomach, thighs and back. It was dreadful to watch them torturing this poor unfortunate creature who was already suffering so dreadfully and without murmuring a word of complaint.

The child's body was already black and blue, but, the witch-doctors persevered remorselessly in their barbarous remedy while, at the same time, calling out to some unknown God for intervention. The spectacle caused great distress to the child's father and mother; the tears they shed and their heartfelt concern found expression in the entire group. The unmistakable anguish written on their faces and the patient fortitude of the poor infant, elicited in all of us a most profound and heartfelt sense of pity.

It seemed to us the entire tribe was fully aware that we shared their pain and anguish and their hostility towards us diminished somewhat. They allowed us to approach the child and our surgeon examined his bleeding mouth which the child's father and another of the *Pecherats* sucked alternatively. It was with great difficulty that we persuaded them to allow the surgeon to administer the milk he had brought.

This was finally achieved, despite the violent opposition of the two medicine men, by a show of drinking some ourselves to prove it would cause no harm. In the end the father decided to allow the child to drink; he even accepted as a gift the coffee pot which had contained the soothing infusion brought by the doctor. The two medicine men displayed the most intense jealousy towards our surgeon, but in the end, they appeared to accept that he was a skilled doctor. They even opened one of the small leather sacks hanging at their sides for him; this contained their feathered head-dress, some white powder, some talc and various other accoutrements of their magic art. These props they have about them at all times. Hardly however, had the doctor peered into the sack then it was immediately re-closed.

It was obvious to us that, while one of the medicine men was working to conjure the evil out of the child, the other was occupied solely in countering the malicious enchantment he believed we had cast upon their people.

As the day drew to a close we returned on board the ship; the child appeared not to be suffering quite as much as he had been earlier. He was, however, still vomiting almost continuous and this caused him great distress. These symptoms, we considered, indicated the glass he had imbibed was still in his stomach. We did not have long to wait to learn that this diagnosis was, sadly, only too accurate. At just before two o'clock in the morning we heard loud and repeated screams coming from the shore. As dawn was breaking, even though the weather at the time was truly dreadful, the *Pecherats* took to their canoes and sailed away.

It appeared to us that they were fleeing from a place that death had rendered uninhabitable and also from the malicious strangers who, they considered, had come only to destroy them.

We knew that under the prevailing weather conditions they would not be able to round the western point of the bay. There then occurred a short period when the weather moderated a little and we saw them hoist their sails; but, almost immediately, a violent squall sprung up and dispersed their fragile vessels out into the open water.

How dreadfully anxious they must have been to get far away from us as quickly as they possibly could. They had abandoned one of their canoes; it being in need of reparation, on the shore;

*satis est gentem effugisse nefandam.*⁷⁹

They must have taken away the impression that we were horrible people and, in light of the dreadful calamity to which they had been subjected; who can blame them for having formed such an opinion? What an appalling loss it must have been to them; a society of so few people, to have taken away from them an adolescent so short a time after he had safely negotiated all the hazards of childhood.

The bad weather continues.

The easterly wind blew with fury and almost without interruption right up until the 13th [January] then, on that day, the weather became quite tranquil. By the afternoon we even thought we would be able to sail.

⁷⁹ It suffices me that I have escaped that horrid crew. – Virgil, *Æneid*.

The night of the 13th and 14th was calm and, by half past two, we had recovered our sheet anchor and shortened-in our main cable. However, by six o'clock we were compelled to reset our sheet anchor as, yet again, the weather had become atrocious and so it remained for the rest of the day. On the 15th the sun shone for almost the entire day; but, the persistently howling wind was far too strong to allow us to leave the harbour.

The frigate is subjected to danger.

On the morning of the 16th the weather was good and the sea almost calm; a little later a gentle breeze sprang up from the north and we set sail with the tidal stream in our favour; ebbing and setting towards the west. It was not very long before the wind got up again and it started to blow hard from the west and the West S West; we knew that it would be impossible, even with this favourable tide, for us to reach Rupert Island. The frigate was sailing very badly and drifting to leeward at an unacceptable rate. Under these present conditions the Etoile had a considerable advantage over us.

We spent the entire day beating to windward between Rupert Island and a feature on the mainland to which we had given the name Passage Point. We made little headway and decided to wait for the ebb with the aid of which we hoped to reach one or other of the anchorages in either Dauphine Bay, Louis the Great Island or in Elizabeth Bay.⁸⁰ However, we had lost considerable ground while trying to beat to windward so I sent one of the ship's boats to take soundings at the south-east side of Rupert Island; my intention was to moor there when the direction of the tidal flow returned in our favour.

We received a signal from our boat, now lying to its own anchor, that they had found an anchorage, but, by this time we had already fallen back under the wind. We tacked towards the land in an attempt to recover some of the ground we had lost on the opposite tack; on both of the occasions, each time we tried to tack, the frigate refused to come about and we were forced to wear ship. At the moment she began to come round under the helm aided by the ship's boats the force of the tidal stream forced her back off the wind.

By the time we had put the anchor down the powerful current had already carried us to within half a cable of the shore. The anchor had fallen onto a rocky seabed and immediately began to drag. The ship now being so close to the shore meant veering out more cable was out of the question. By this time we had only 3½ fathoms of water under the poop and were barely three ships lengths from the coast. Happily a light off-shore breeze then came up and straightway filled our sails to carry us away from the coast.

All of our own boats and those of the Etoile had come to our assistance; they had positioned themselves on the seaward side of the frigate and were towing us away from shore. We veered our anchor cable, to which we had attached a buoy, but, unfortunately when only half of it was out of the

⁸⁰ From Cape Gallant to Elizabeth Bay the coastline runs almost exactly West N West; the distance from one to the other being about 4 leagues. Between these two points there are no anchorages on the continental side of the strait. The water here is too deep to moor even close to the coastline. Elizabeth Bay is open to the South West and the distance between the two points of its opening is ¾ of a league. The breadth of this bay is also about ¾ of a league. The coastline within the bay is sandy; as is also the bay's south-east side. In the northern part of the bay there is a reef which projects out into the waters of the bay. The excellent anchorage within this bay has a depth of 9 fathoms and the seabed is of sand, gravel and coral. The following bearings were observed from this anchorage: the easterly point of the Bay – South S East 5° East; the westerly point of the bay – West ¼ N West; the easterly point of Louis the Great Island – South S West 5° South. The reef itself bears North W ¼ North. -deB

hawse pipe it fouled below the deck bringing the frigate up sharply thus placing us once again in a perilous situation. With great haste we cut through the cable and the promptness with which we took this action was the ships salvation. Now the wind began to freshen and so, after making two boards with no ground gained, I made my mind up to return to Port Gallant where we anchored at eight o'clock that evening in 20 fathoms on a muddy bottom.

The ship's boats that I had instructed to recover the cable and anchor returned alongside us as night was falling having successfully completed that evolution. So it was that this day, which had begun with such fine weather developed into one that caused us the most frightful anxieties.

Violent storm.

The following day was even more tempestuous than any of the ones that had preceded it. The wind in the strait caused maelstroms of swirling water that raised themselves up to the height of the mountains around us; we saw several of these whirlwinds develop at exactly the same moment yet then tear off in directions completely opposite to one another.

Towards 10 o'clock the weather seemed to ameliorate somewhat; then, at midday, there was a single clap of thunder, the only one we had heard during all the time we had been in the strait. It was as if this were a signal prompting the wind to increase in fury yet one more time because, immediately after it occurred, the wind began to blow even more violently than it had done during the morning. We began to drag our anchor and were compelled to set our sheet-anchor, to bring our lower yards on deck and to strike top-masts. Paradoxically, despite the awfulness of the weather which raged about us all the shrubbery ashore was in flower and the trees glowed brilliantly green. This glimpse of beauty, so at odds with the dreadful weather, did not by any means relieve the gloomy, almost sinister, aspect of the scene everywhere before our eyes.

Even those individuals who were blessed with a most buoyant disposition would have been subdued by this appalling climate. So persistently foul was the weather here that animals, of every species, would have sought sanctuary from it; and yet, at this awful location a handful of our fellow human beings somehow manage to eke out a pitiful existence.

Discussion on an assertion concerning the St Barbara Channel.

The 18th and the 19th [January] turned out to be a calm respite between 2 periods of bad weather. We recovered our main sheet-anchor, raised the lower yards and set up our top-masts. I then sent away the Etoile's barge, it being sufficiently robust and in a good enough state of repair to contend with even the most severe weather conditions, with the object of reconnoitring the entrance to the St Barbara Channel. (*Canal Sainte-Barbe*) According to the extract given by Mr Frezier and taken from the journal of Mr Marcant, who discovered this channel, it bears south-west and South W $\frac{1}{4}$ South from Elizabeth Bay. The Etoile's barge returned on the 20th and Mr Landais, who was in charge of the survey, reported to me that, having followed the course and the leading marks indicated in of Mr Marcant's journal extract, he had not been able to locate the entrance into the channel.

In the position where had indicated it there was nothing more than a narrow channel blocked with pack ice; in reality it was nothing more than a small bay in the Tierra del Fuego coastline.

Mr Landais had considered that entering into the channel would be dangerous because nowhere within it was there a good anchorage. He also reported that running across the channel, almost to its middle part, there was a bank covered in mussels.

The barge had later made a circuit of Louis the Great Island starting from the south side and then returned into the Magellan Strait; no sign of any other channel had been found. He had seen nothing more on the coast of Tierra del Fuego other than an excellent bay. No doubt it was the same bay to which Beauchesne had given the name Nativity Bay (*la Nativité*).

Having reviewed the situation in the light of the information now available to us we remarked that if, after leaving Elizabeth Bay, a course between south-west to South W $\frac{1}{4}$ South were to be followed (as Mr Frezier said Mr Marcant did) it would be necessary to sail right through the centre of Louis the Great Island!

These considerations caused me to conjecture that St. Barbara Channel was most likely to be located on that side of the Magellan Strait opposite the bay where we were now lying at anchor. From the high mountains that encircle Gallant Harbour we had often observed a vast channel dotted with small islands to the south of Charles and Montmouth Islands. As far as we could see to the South the passage through this channel did not appear to be interrupted by any obstructing landmasses.

However, we could also see another opening to the south of Louis the Great Island. We had taken that to be St Barbara's Channel because it seemed to fit in most closely with Mr Marcant's journal. As soon as we had determined that this opening was nothing more than a deep bay we were left in no doubt that St Barbara's Channel was not across the strait and directly opposite Gallant Harbour, that is to say, to the South of Charles and Montmouth islands. Indeed, when we read again what Frezier had said, taking it in conjunction with the chart of the strait that he had produced, we concluded that Mr Frezier in his reading of Mr Marcant's report had placed Elizabeth Bay (from where he had set out prior to entering into St Barbara's Channel) at a distance of between 10 and 12 leagues from Cape Froward.

Mr Marcant had therefore erroneously taken Discord Bay, which is indeed 11 leagues from Cape Froward, to be Elizabeth Bay. If it was the case that Marcant had really sailed from Discord Bay (since it is a league to the east of Gallant Harbour) and taken a south-west and South W $\frac{1}{4}$ South course, then, passing by a the most easterly point of Charles and Montmouth islands, (which he wrongly took to be Louis the Great Island; a mistake which is very easily made by a navigator unfamiliar with the locality) he would have gone into that channel, the one with all the small islands, that we had seen from the mountain tops around Gallant Harbour.

Benefits that would accrue if an accurate chart of St Barbara's channel was available.

The acquisition of accurate information concerning the nature of St Barbara's channel would be of the greatest interest to navigators; the time needed to pass through the Magellan Strait would be considerably reduced. The passage from the east, up to as far as Gallant Harbour is not of very long duration; the most troublesome part lies in rounding Cape Froward. However, that difficulty since the discovery of the three harbours on the Tierra del Fuego side of the strait has been eased considerably.

Should contrary winds, tending to be from the north, prevent continuing via the normal channel when Gallant Harbour has been reached, the option would be open to go via St Barbara Channel so that in less than 24 hours one would be in the Southern Ocean.

It had been my intention to send two of the ship's boats into this channel, which I firmly believe to be St Barbara's Channel. Had it been possible to conduct this survey it might have provided a solution to a problem regularly encountered at this location. Unfortunately, the foul weather prevailing at the time prevented us putting this plan into effect.

Struck by a tempestuous winds.

During the 21st, 22nd and 23rd [January] squalls, snow and rain continued almost without intermission. On the night of the 21st and 22nd there was a short interval of calm; however, it seemed to us that the winds had only given us this moment of repose in order to gather the strength that they might unleash upon us a renewed bout of tempestuousness.

As we had expected, a dreadful storm from the south-west then struck us like a hammer blow. So fierce was it that even the most ancient sailors amongst us said they had ever seen it is like before. Both the ships began to drag their anchors and it became necessary to deploy our main bower anchors, un-ship lower yards and bring down the top-masts. Our mizzen-sail, which was brailled up at the time, was carried away by the tempest. Fortunately, this tumultuous storm was of only short duration for, on the 24th, the weather moderated considerably; the sun even showed his face and it became calm once again.

We immediately began preparations to make the ship ready for sailing. During the time following our return to Gallant Harbour, several tons of extra ballast had taken on board. We had also re-stowed the stores in the hold to correct our trim; this we hoped would improve the frigate's sailing qualities and in this we were, to a certain extent, successful. Nonetheless, when it became necessary to navigate the ship in a strong tidal stream we always experienced those difficulties which are inherent in ships of frigate length under similar circumstances.

We leave Fortescue Bay.

At one hour after midnight on the 25th we recovered one of our anchors and shortened cable until the anchor was underfoot. At three o'clock we weighed and with the assistance of our ships boats under oars we made our way out of Fortescue Bay. There was a fresh breeze coming from the north which, by half past five, had gone round the east and was blowing steadily. We set all our topgallant and studding sails (canvas that is but rarely deployed in this locality) and holding to the centre-most part of the strait we followed the sinuosities that Narborough had, with good reason, referred to as the Crooked Arm (*le bras tortueux*)⁸¹.

Between the Royal Islands and the mainland the strait is about 2 leagues wide, reducing to not more than one league where the strait passes between Rupert Island and Passage Point. After that, between Louis the Great Island and Elizabeth Bay it again widens out to a league and a half. From the easternmost point of Elizabeth Bay there lies a seaweed covered reef which extends into the strait for a distance of a quarter of a league.

Description of the Strait from Cape Gallant to the Pacific Ocean.

Westwards from Elizabeth Bay the coastline follows a West N Westerly direction for a distance of 2 leagues until the river, referred to by Narborough as Bachelor River and which Beauchesne called The Massacre River, is reached. In the mouth of this river there is a very easily identified anchorage for this river flows out from a deep valley on the west side of which stands a very high mountain. The western side of the river's mouth is of low-lying terrain covered with trees and a sandy shoreline. The distance from Massacre River to the false strait or channel called St Jerome's, I estimate to be about

⁸¹ Nowadays called Crooked Reach.-JFF.

three leagues. The coastline in this part of the strait runs North W $\frac{1}{4}$ West. The entrance to the channel appears to be about half a league in breadth and when one is inside the channel the land can be seen bearing off towards the north. When one is crossing the mouth of the Massacre River it is only possible to see the false strait; it would be very easy to mistake it for the real strait. That is, in fact, exactly what happened to us because at this location the coastline begins to advance West $\frac{1}{4}$ S West and West S West as far as Cape Quad; this causes it to appear to be part of the land-mass of Louis the Great Island, effectively masking the entrance to the true channel.

Louis the great Island is about 4 leagues long and its northern coastline runs in a West N Westerly direction as far as Dauphine Bay; this bay, which has a breadth of 2 miles or thereabouts, has an opening of about half a league after which it runs towards the west up to its most westerly part, which is called Cape Louis. Having recognised that we had made an error, in confusing the false channel with the true, one we set our course to sail parallel to the coastline of Louis the Great Island at a distance from it of about 1 mile.

We made a positive identification of Philippeaux Harbour and it appeared to us to be a convenient and well sheltered cove. By noon we had Cape Quad bearing West $\frac{1}{4}$ S West 2° South at a distance of 2 leagues and Cape St Louis at East $\frac{1}{4}$ N East at about $2\frac{1}{2}$ leagues distance. The excellent weather continued for the remainder of that day and we sailed on with all our canvas spread.

From Cape Quad the strait has no significant turnings and takes on a West N West and North W $\frac{1}{4}$ West direction; this characteristic cause this section to be known as Long Reach (*longue rue*). Cape Quad itself presents a remarkable sight; it comprises an assembly of sheer rocks the very topmost of which, from the manner in which they are fragmented and distributed in relation to one another, appear for all the world to be the ruins are some ancient buildings. Right up as far as Cape Quad the coastline is completely tree-covered; the greenness of these trees has the effect of somewhat softening the otherwise harsh aspect of the ice covered mountains. Once we had rounded Cape Quad the nature of the terrain changed completely. Now the coastline on both sides of the strait comprised no more than naked, arid rock bereft of vegetation and seeming to be utterly devoid of soil covering. The summits everywhere are eternally snow-covered and the deep valleys are filled with immense layers of ice the colour of which is testament to its great antiquity.

Narborough, when he saw the terrain hereabouts, was so struck by its horrible aspect that he named the land here The Southern Desolation; it is impossible to imagine that any more dreadful place exists upon the Earth.

When one is abreast Cape Quad, the Tierra del Fuego side of the strait appears to end in a pronounced cape which is called Cape Mundai. I estimated it was about 15 leagues from Cape Quad. On the mainland side of the strait there are to be seen three capes.⁸² To the first of them, because of its particular appearance, we gave the name Cape Split (*Cap Fendu*); it is about 5 leagues from Cape Quad and is situated between two fine bays. Should the nature of the ground in these two bays be as good as the shelter the locations afford they will both prove to be very safe and convenient anchorages indeed.

The other two bays we named after our ships; Cape Etoile being 5 leagues to the west of Cape Split. Cape Boudeuse, also in this section of the coastline, is about the same distance further westwards from Cape Etoile. All the land in this region is high and steep; both sides of the strait appear to be free

⁸² Bougainville has not marked the position of any of these three capes on the chart he provides. I have indicated their probable locations, shown in dark blue on the map on page 71 .-JFF

from hazards and there are several good anchorages to be found. Happily, the weather was in our favour and, as a consequence, we did not take the time to examine them in detail. The part of the strait within the section known as Long Reach has a breadth of about 2 leagues. Further on it becomes narrower until, opposite Cape Mundai, the width of the channel is hardly more than 4 miles.

An alarming night.

At 9 o'clock in the evening we were between East $\frac{1}{4}$ S East and East S East of Cape Mundai, it being about 3 leagues distant. A very strong easterly wind had been blowing for some considerable time, however, as the weather conditions were generally very good, I decided not to anchor that night but to continue under reduced sail with reefed top-sails and studding-sails set. Towards 10 o'clock that evening a mist started to descend about us and the wind increased to such an extent that we were forced to recover our ship's boats. It started to rain and the night became so obscure that by 11 o'clock we could no longer see the land on either side of the strait. Half an hour later, having estimated that we were now abreast Cape Mundai, I sent a signal to heave-to on the starboard tack and it was in this manner that we passed the remainder of the night; either filling or backing our sails to correct our position when we estimated we were approaching too closely to one side of the strait all the other. The alarming situation we found ourselves that night was for us one of the most critical events of the entire voyage. At half past three the first glimmers of the dawn gave us sight of the land; knowledge that I did not delay in putting to use. We set and held our course at West $\frac{1}{4}$ N West until 8 o'clock in the morning. From half past eight until noon we steered between West $\frac{1}{4}$ N West and West N West. During this period the wind blew and continuously varied between light airs and a fresh breeze from the East; it remained very misty.

Occasionally we caught glimpses of the land but for most of the time it was completely obscured from view. Finally at midday, from our masthead, we caught sight of Pillars Cape and the islands known as the Four Evangelists; we then advanced steadily, progressing until Pillars Cape was on our beam. At this moment, to our great joy, an immense horizon was revealed to us. It was unconstrained for as far as the eye could see; totally unrestricted by the presence of enclosing land. From the west a heavy rolling swell announced that we would very soon be entering into the great open ocean. Our benevolent easterly wind now deserted us and went round to the West S West. We set a north-westerly course until half past two when the Pillars Cape bore South 3° West and we raised Victory Cape away to the north-west of us.

A description of the locality where the Magellan Strait meets the Pacific Ocean.

After having passed Cape Monday, the northern coastline becomes curved like a bow and the strait opens out first to 4, then 5 and finally to 6 leagues wide. By my estimation the distance from Cape Mundai to Pillars Cape, which is the strait's westerly limit on its southern side, is about 16 leagues. Between these two capes the strait runs in a West $\frac{1}{4}$ N Westerly direction. The coastline on the southern side here is elevated and steep while that on the north side is fringed with small islands and rocks which make too close an approach a dangerous proposition. The most prudent option is to stay as close to the southerly side as is practicable.

It is not possible for me to describe in greater detail the nature of the land in this the final part of the strait for we caught no more than occasional glimpses of it through the ever-present mist. The parting sight of land we had was of Victory Cape on the north side. This promontory appeared to us to be of

medium height, as did Cape Desire, which is located on the Tierra del Fuego side, outside the limit of the strait proper. Cape Desire is some 2 leagues to the south-west of Pillars Cape. The coastline between these two capes is fringed, for a distance of about a league from shore, with a series of small islands and rocks known as the Twelve Apostles; over these rocks the sea breaks constantly.

Pillars Cape is a very elevated section of the terrain; or rather it is an enormous mass of boulders at the end of which there stand two great sheer fractured rocks. They resemble towers and lean towards the north-west where they delimit the extremity of the cape. At a distance of 6 or 7 leagues to the north-west of this cape is to be seen a group of 4 small islands called The Evangelists; three of them are low-lying, whilst the fourth in the shape of a haystack, is somewhat separated from the others. The Evangelists lie to the south-west of Victory Cape at a distance of between 4 and 5 leagues.

In order to make one's departure from the strait one may take either the southerly or the northerly route. My own advice would be to pass to the south of the Apostles; this particularly applies when entering the straight from the Pacific Ocean side. Additionally it is sound thinking to keep close to the southern coast as the northerly one is fringed with small islands that give the impression of the coastline here being comprised of a number of large bays. This could easily cause dangerous errors of navigation to be made.

From 2 o'clock in the afternoon the prevailing winds were fresh and varied between West S West and West N West; we sailed on until sunset with all our canvas spread having the intention of rounding the Four Apostles. For a considerable period of time we were concerned that we would fail to achieve this and would be forced to pass yet another night within the strait; this would have meant our departure would have been delayed an entire day. However, by six o'clock that evening we were making long runs between tacks and by 7 o'clock Pillars Cape had been rounded. By 8 o'clock we were completely clear of the land. We had the advantage of a good northerly wind and so, with all our canvas aloft, we sailed briskly into the Southern Ocean.

Our point of departure from the Magellan Strait.

We took our bearings and I set my point of departure as 52° 50' south latitude and 79° 9' longitude west from Paris. So it was, after having suffered constant bad weather and contrary winds for 26 days since leaving Gallant Harbour, we now found ourselves blessed with 36 hours of favourable wind; more than, even in our wildest dreams, we could ever have hoped for to carry us through the latter part of the strait and into the Pacific Ocean. It is my honest belief that we have been the first ship to make the passage from Gallant Harbour all the way to the Pacific without it ever having to put down an anchor.

General observations on this navigation.

I estimate that the entire length of the strait from Virgins Cape to Pillars Cape, is about 140 leagues. It took just 52 days to complete this part of our journey. I think it is worth re-emphasising here the fact that from Virgins Cape to as far as Black Cape, when the tide is flooding, the current runs in an easterly direction and when it is ebbing it flows towards the west. Additionally, although the tidal stream here generally runs very strongly from Black Cape to Gallant Harbour, its flow in both directions is irregular and is less strong than in other parts of the strait. From Gallant Harbour to Cape Quad the currents are violent. Finally, from that cape to as far as Pillars Cape they are generally less strong. Nevertheless, in the entirety of this section of the strait, westward from Gallant Harbour,

the tidal stream follows the same general law which applies from Virgins Cape onwards; that is to say, the current moves eastwards when the tide is flooding and westwards during the ebb. However, I must draw attention to one other important thing and give mariners due warning; I most strongly assert that the direction of the tidal flow in the Magellan Strait is exactly opposite to what navigators before me have observed. This disparity, between what several other observers and I have noted at different times concerning the direction of the tidal stream, means that the true phenomena dictating current direction are yet to be comprehensively determined.

This issue, concerning the direction of the tidal stream has caused me, on numerous occasions, to regret that the original journals of Narborough and Beauchesne were not available to us. As a result we have been obliged to rely on extracts taken from these documents. Extracts made and disfigured by authors who, in their ignorance, have expunged much information because it was of use only to navigators.

These incompetents, when confronted with information the significance of which is beyond their comprehension because they do not understand the terms and expressions fundamental to the art of navigation, consider the data worthless and substitute absurdities in its place. Their sole objective is to produce a book for the superficial amusement of dilettantes of both sexes. All that they do succeed in producing, however, is nothing more than a work tiresome to everybody and of use to no one.

Conclusions drawn.

Despite all the difficulties we encountered during our passage through the Magellan Strait, the following is my advice to navigators.

From the month of September until the end of March the Magellan Strait route is preferable to going round Cape Horn. There is beyond doubt that delays will occur during any passage through the strait, but, this should not be considered a total loss for here are to be obtained abundant supplies of water, timber, shellfish and, at certain times, very good supplies of fish. It is equally true that the incidence and injurious effects of scurvy amongst ships crews is considerably less during a passage through the strait than it is for one made round Cape Horn. Indeed, after our own particular passage; not one member of our ship's crews was suffering from this affliction. However, for the other months of the year, when the nights are 16, 17 or 18 hours long, I am amongst those who would opt for the open ocean route. Here, the frequency of head-winds and the extremely rough seas present a lesser danger than the unwise choice of attempting to feel one's way blindly between the two shorelines of the strait.

VOYAGE

AROUND THE WORLD.

SECOND PART,

From our entrance into the Southern Sea,

Until we return to France,

Et nos jam *tertia* portat

Omnibus errantes terries & fluctibus æstas. Virg.Liv.I⁸³

FIRST CHAPTER

*The passage from the Strait of Magellan to
the island of Tahiti; discoveries made on the way.*

January 1768.

Our course after leaving the Strait.

After having left the strait and entered into the Southern Sea we had several days of variable winds which passed through west from the south-west to the north-west. Immediately following this we had winds from the south and from the South S East. I had not expected to meet with winds from this direction as early on as this. Ordinarily one would expect westerly winds until reaching the latitude of 30°. With this in mind it had been my intention to go to Juan Fernandez Island and there attempt to make accurate astronomical observations. Additionally, I had planned to establish an accurate departure point before setting out across this vast ocean; the extent of which is shown differently on the charts of several navigators. However, this unexpected encounter with winds from the south and south-east caused me to abandon calling in at Juan Fernandez as I did not want to lengthen the duration of the passage.

⁸³ It is now the second year of wandering by lands and seas. (Bougainville freely adapts v.755-6 Of Virgil's Æneid.) -JFF

Observations on the nature of the Chilean coastline.

During the first few days I kept my course close to westerly; this was as much to take advantage of the prevailing wind direction as to distance myself from the Chilean coastline, the nature of which is not given with any degree of certainty on the charts currently available. However, now that the winds were from a predominantly westerly direction, we ought, providing the chart made by Don George Juan and Don Antonio de Ulloa is accurate, to have by now sighted the coastline; these two Spanish officers having corrected the ancient South American charts.

They indicated, based upon conjectures they no doubt thought to be well founded, that the coast between Cape Corse as far as Chiloe runs north-east and south-west. The chart corrections they made would benefit greatly from a new revision for, in its present form, their chart provides only cold comfort to navigators who, after coming out of the strait attempt to sail northward but, are beset by winds varying continually from south-west to North W by West.

Sir John Narborough, after leaving the Strait of Magellan in 1669, ran along the Chilean coast making an examination of all the coves and inlets up as far as the Baldivia River, which he went into. He categorically states that the coastline between Cape Desire, up as far as the Baldivia River, runs North 5° East. In Narborough's statement we have something far more positive than the conjectural assertion proposed by Don George Juan and Don Antonio de Ulloa. Had their suppositions been true we would have encountered the coastline on the course we were obliged to take, but in fact, we did not.

Order of sailing for the Boudeuse and the Etoile.

As soon as we were in the Pacific Ocean the captain of the Etoile and I agreed upon an order of sailing that would enable us to cover the greatest area of the ocean. Every morning the Etoile would sail as far south from me as the weather conditions would permit us remaining in sight of one another; then, every evening we would rendezvous before nightfall and hold station, from one the other, at about half a league distance. In this manner if the Boudeuse encountered some sudden and unexpected danger, during the night, the Etoile would be on hand to render whatever assistance was appropriate. This same order of sailing was adhered to during the entirety of our voyage.

The loss of a sailor fallen overboard.

On 30 January one of our sailors fell overboard and, unfortunately, because the wind was a very strong and there was a heavy swell running, all our best endeavours to save him were unsuccessful.

Unsuccessful search for land, as reported by David.

I set course in order to find the land that David, one of the English privateers, had seen between parallels 17° and 18° south in 1686. The Dutchman Roggewin (Jacob Roggeveen) had searched for it in 1722, but, without finding.

February 1768.

Uncertainty concerning the latitude of Easter Island.

I continued looking for the land that David had reported until 17 February and on the 14th I had passed over the position where it is shown on Mr Bellin's chart. I had decided not to make any attempt to locate Easter Island because its latitude is not stated anywhere with any degree of accuracy. Several geographers agree that it is located somewhere between 27° and 28° south. Mr Buache alone estimates it to be near the 31st parallel. Nevertheless, during the day of the 14th, being in the observed latitude 20° 7' south and estimated longitude 104° 12' west, we saw two birds very much resembling *equerrets*,⁸⁴ a species which normally does not stray further than 60 or 80 leagues from land.

We also saw a clump of the type of green vegetation that attaches itself to the hulls of ships. These sightings caused me to persevere on the same course until the 17th. Having deliberated upon David's report I believe that the land that he reported seeing is none other than the islands of St Ambrose and St Felix which are situated 200 leagues from the Chilean coast.

Meteorological observations.

From 23 February until 3 March the weather was calm but with frequent rain; the westerly winds changed constantly from south-west to north-west. Just before noon each day we were subjected to sudden squalls accompanied by thunder. We were perplexed and asked ourselves what could be the reason for this wind so uncommon south of the Tropic in this ocean renowned, more than any other sea, for the constancy and freshness of its east and south-east trade-winds. Was it not considered to be the case that these winds blew continuously throughout the year? As it turned out this was not the only occasion when we were obliged to ask this self-same question.

Our astronomically determined position compared to that obtained by our reckoning.

During the course of the month of February Mr Verron brought to my attention the results of observations he had made to determine our longitude. The first of them, taken at noon on the 6th, differed only from my estimated position by 31' to the west of what he had observed. His second observation, taken at noon on the 11th, differed from my estimated longitude by 37' 45"; this time putting me further to the east than he had calculated. His third set of observations, taken at midday on the 22nd, put me further to the west than he was by 42' 30". Finally, according to his observations, made on the 27th, there was a difference showing me to be 1° 25' to the westward of his observed position.

It was at this time that we encountered a period when the winds were either calm or contrary. The thermometer, during the time that we had been below the 45th parallel, had indicated a temperature of between 5° and 8° above freezing point; it now began to get a little warmer with every passing day. During the time that we were between the parallels of 27° to 24°, the temperature fluctuated between 17° and 19°.

Soon after leaving the strait an outbreak of sore throats, of almost of epidemic proportions, occurred. We attributed the cause of these symptoms to the water we had taken aboard in the strait.

⁸⁴ *Larus canus*, the Common Gull.-JFF

The origin of the water was melted snow and our solution was to add a pint of vinegar daily to the crew's water ration and to immerse a heated cannon ball in the water barrel. Happily, this sickness responded quickly to this simple remedy and by the end of February none of the crew was on the sick list other than four sailors who were still showing mild symptoms of scurvy. During this time supplies of fish were abundant and for 8 or 10 days we caught enough bonitos and great ears (*grand oreilles*) to provide a square meal for every sailor of the two ship's crews.

1768. March. We see the first islands.

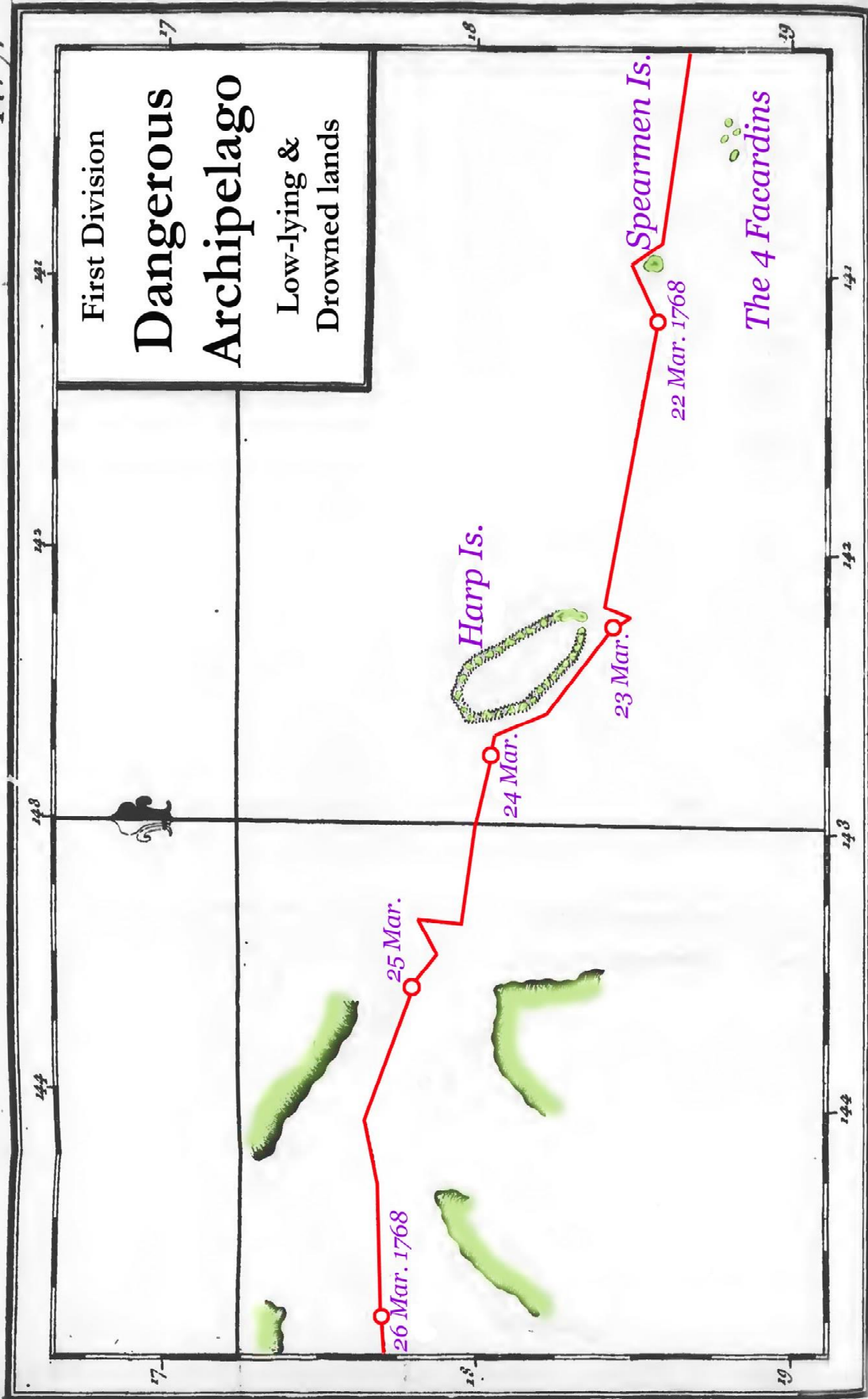
During the month of March we sailed parallel to the first lands and islands which are marked on Mr Bellin's chart under the name *Isles de Quiros*. On the 24th we caught a tuna in the stomach of which we found several undigested small fish of a type that are known to exclusively frequent coastal waters; this indicated to us that there must be land not very far from us. Indeed, on the 22nd at six o'clock in the morning we caught sight of four small islands to the South S East 5° East and, at exactly the same time, a small island about 4 leagues to the west of us. We named these islets The 4 Facardins (*Les Quatre Facardins*),⁸⁵ but, as they were too far to windward for us to approach them, we set our course towards a small island we could see ahead of us.

Observations concerning one of these islands.

As we drew near to this island we could see that it was surrounded by a beach of level sand and that the entire interior was covered with brushy shrubbery; towering above the undergrowth were coconut trees in full fruit. There was broken water offshore to both the north and the south of this island; a heavy ground-swell beat violently against the eastern coastline which prevented us making a landing from this direction.

The greenness we could see enchanted us greatly; particularly the profusion of coconut trees. The mouth-watering sweetness of their succulent fruit enflamed our thoughts and in our imaginations we saw ourselves seated, on flower-studded lawns, in the shade beneath them. There were numerous flocks of birds; a considerable number of them were diving into the waves along the coast suggesting that fish were abundant in the sea here. This profusion of good things provoked in us a burning desire to make a landing. We considered the best place to make our approach would be on the western side, so, we followed the coast for a distance of about 2 miles. Everywhere we looked the sea was breaking with the same force; nowhere was there even the smallest cove or creek to provide a little shelter and break the force of the crashing waves. Seeing that there was not the slightest chance of getting ashore without risking our boats being dashed to pieces; we reluctantly resumed our course.

⁸⁵ The title of a Fairy Tale for adults by Count Antoine Hamilton; It is a parody of The Arabian Nights tales which, at this period, were popular in France. -JFF



We discover, despite its small size, the island is inhabited.

No sooner had we made this decision than a sailor cried out that he had seen several men run down to the water's edge. Never would we have believed that such a small island could have been inhabited; my first thought was that they were probably Europeans who had been ship-wrecked here. I immediately gave the order to heave to, for I was determined to do everything in our power to rescue them. By the time we had made these preparations the men had gone back into the woods. They soon afterwards reappeared, some 15 or 20 of them running as fast as they could. They were completely naked and each of them carried a long spear which they shook at us in a most aggressive manner.

Following this menacing demonstration they withdrew once more into the woods where, we could see with the telescope, they had several huts. These men appeared to us to be quite tall and had brown skin. Who, I asked myself, had brought these men to this place? What communication can they have with men in other locations? In what manner can they control their own numbers when they multiply on an island no more than one league in diameter?

I gave this island the name Spearmen Island (*l'Isle des Lanciers*). Our position was now at least a league to the north-east of this island and I made a signal to the *Etoile* to take soundings; she reported back that with 200 fathoms of line no bottom had been found.

From that day forward we shortened sail during the hours of darkness for we were concerned lest we suddenly came upon more of these low-lying islands; the approaches to which are so hazardous. For a part of the night of the 22nd and 23rd we were obliged by the powerful winds of a storm to lie to the wind; (*rester en travers*). When this tempest descended upon us it was accompanied by heavy rain and thunder. As soon as it grew light enough we were able to see land bearing from North E $\frac{1}{4}$ North to North N West.

We come across another group of islands.

We changed our course to approach this land more closely and by eight o'clock we were about 3 leagues off its most easterly point. Then, even though there was a light mist, we could clearly see breakers along its entire coastline. It gave the impression of being low-lying and covered with trees. We went about and stood-off while we waited for the visibility to improve enough for us to make a less dangerous approach. When the mist had dissipated we resumed our approach and by 10 o'clock we were within one league of the island. We sailed parallel to the coast hoping to discover as suitable place to make a landing and, although we continuously cast the lead, we could find no bottom at 120 fathoms. For the entire length of the coastline there was an offshore bar over which the sea broke furiously and continuously.

Description of the largest of these islands.

It very soon became apparent that this island was in reality 2 narrow tongues of land that were joined together in the north-westerly part but, having between them an opening at the south-easterly extremity. Thus, the entire centre part of the island is a lagoon over its entire length of 10 to 12 leagues. It is oriented south-east and north-west in such a manner that this island appears to be like an elongated horseshoe having its opening towards the south-east.

The breadth of these two strips of land is so limited that we could see the sea beyond the most northerly of them. They appeared to comprise of nothing more than sand dunes interspersed with patches of soil and were generally devoid of any trees or other vegetation. However, on some of the more elevated sand dunes, there were coconut trees, other smaller trees and some scrubby undergrowth.

During the afternoon we noticed that there were canoes navigating on the lagoon between the two spits of land. Some of them were under sail while others were being propelled by paddles; the savages in them were completely naked. That same evening we saw a considerable number of aborigines spread out along the coastline. All of them appeared to be carrying long spears of the same sort as those with which we had been threatened by the inhabitants of the previous island.

We had still not found a suitable place to make a landing; everywhere we looked the seas were breaking with equal force. With the coming of night we gave up looking and spent the hours of darkness cruising under topsails back and forth off the island. By the morning of the 24th, still having not discovered any suitable landing place, we gave up on our plans to land upon this most inaccessible scrap of land.

I asked myself, what manner of land was this extraordinary place which we had called, on account of its unusual shape, Harp Island? Was it still rising out of the sea? Was it in a state of decline? By what means and when had it become populated? Its inhabitants appeared to us to be tall and well-proportioned; I greatly admired their courage for they seemed to unconcernedly exist upon a mere scrap of sand that seemed likely at any time to be engulfed by the ocean.

The first group of islands; we name it "Dangerous Archipelago".⁸⁶

On the same day at five o'clock in the evening we saw a new piece of land at a distance of 7 or 8 leagues. Because of the unfavourable weather; there were frequent storms and squalls causing restricted visibility, we were unsure of its exact position and as a consequence we were forced to spend the night tacking back and forth well clear of the island. On the morning of the 25th we made our approach and saw that it was very low-lying; about 24 miles long and extended on a south-east to north-west axis.

We continued to navigate amongst these low-lying islands; some of which were, in fact, partly submerged. We made an examination of 4 of them; all of these were similar in nature, all were unapproachable by boats and none of them worth spending the time or effort that would be required to make a landing. I gave this group of islands, of which we had seen 11 and of which there were probably a greater number, the name Dangerous Archipelago.

Sailing amongst these low-lying lands, studded as they are with reefs upon which the seas seem to break everywhere, is an extremely perilous business. It is a region where one must take the most stringent precautions to ensure the safety of the ship; this is of particular importance during night-time

Error in the charts of this part Of the Pacific Ocean.

I made up my mind to set our course further to the south in order to be clear of this dangerous part of the ocean. Indeed, by the 28th there was no longer any land in sight. Quiros⁸⁷, in 1606, was the first to

⁸⁶ Refer to map Dangerous Archipelago on page 114.-JFF

discover the southern part of this chain of islands which extend in a West N Westerly direction. It was here in 1722, in the region of the 15th parallel, that Admiral Roggevin found himself unexpectedly hedged about and, as a result, he gave the group the name The Labyrinth. For my part I have no idea what criteria our geographers used when setting down the position and extent of these islands on their charts. They seem to have taken Quiros' observations, made when he first sighted them, and somehow deduced that they extend for 70 leagues. The only thing that one can sensibly infer from reading Quiros's journal is that the first land he saw, after leaving Peru, extended over a distance of something more than 8 leagues. However, far from giving the impression that he considered this land had any great extent; he commented that the aborigines living there gave him to understand that he would come across other more significant lands as he continued on his course. If there had, in fact, been any significant lands here we could not have failed to have seen them since the most southerly latitude reached in our navigation through this region was 17° 40'. That is to say exactly the same latitude at which Quiros said had seen the land reported in his journal. Upon this flimsiest of evidence the geographers have seen fit to mark onto the charts a land of considerable extent. It is not difficult to understand that the presence of such a large number of low-lying and almost submerged islands would give rise to the supposition that there must be more extensive land in the region. Nonetheless, geography is a science and the information it promulgates must be based exclusively on facts. These charts owe their origin to nothing more than men's conjectures and conjectures will inevitably result in serious errors that can only be corrected at great risk and cost to navigators.

Comparison between astronomical observations and our reckoning of the ships course.

During the month of March Mr Verron presented me with 3 observations of longitude. The first of these he had made at noon on the 3rd, using Mr Handley's octant. This differed from my reckoning by only 21' 30"; my reckoning putting me further to the West than his observed longitude. The second observation made with the mega-meter, reduced to noon on the 10th, differed considerably from my estimated longitude; it being 3° 6' more to the west than his observation. This ran counter to the result of the third observation made with the octant on the 27th. My own estimate differed only from the observation by 39' 15"; my estimated position being further to the east than that observed using Handley's octant.

It is worth mentioning here that since leaving the Magellan Strait I have used as the basis for my longitude calculations the point of departure taken at that time. Since then I have made no further corrections based either on observations, astronomical or otherwise.

Metrological observations.

The thermometer during this month has constantly indicated a temperature between 19° and 20°, this has been so even when we were close to land. At the end of the month we had westerly winds for 5 days during which squalls and storms, accompanied by continuous rain, followed one after the other in constant succession and almost without pause. It was at this time that scurvy once again raised its ugly head; 8 or 10 of our sailors were affected by it. I believe that high humidity is one of the conditions that considerably increase the likelihood of this illness developing.

⁸⁷ Pedro Fernandes de Queirós (1565–1614) was a Portuguese navigator best known for his involvement with Spanish voyages of discovery in the Pacific Ocean. - JFF
http://en.wikipedia.org/wiki/Pedro_Fernandes_de_Queir%C3%B3s

The advantageous employment of lemonade powder and desalinated water.

Every day each of our sailors was given a ration of a pint of lemonade made with Faciot Powder (*la poudre de faciot*).⁸⁸ During the course of our voyage the relatively good health of our crew owed a great deal to the effectiveness of this beverage. Additionally, from the 3 March I had started using the seawater distilling equipment invented by Mr Poissonier. The water it produced was used in the galley for making soup and in the cooking of our meat and vegetables. This was a practice we continued during the voyage until we reached New Britain. This supplementary source of water stood us in good stead during the course of this long crossing. The still's furnace was lit at five o'clock every evening and was not extinguished until five or six o'clock in the morning. During the course of each night we made in excess of a barrel of water. In order to conserve fresh water we continued our practice of kneading our bread with seawater.

April 1768.

The second section of lands; the Bourbon Archipelago.

On April 2nd April at 10 o'clock in the morning we saw a high and steep mountain to the North N East of us; it had the appearance of being totally isolated. I gave it the name The Boudoir or Boudeuse Peak. While we were sailing northwards in order to make a closer examination of it another tract of land revealed itself to the West $\frac{1}{4}$ N West. This second land was equally as high as the first one but, at the distance separating us from it we were unable to determine how extensive it might be.

Tahiti sighted.

We had reached a point where the need to replenish our supply of timber and foodstuffs had become urgent; we were optimistic that this was a place where that necessity would be satisfied. During this entire day we were becalmed until the evening when a breeze sprang up. We ran on towards the land until 2 o'clock in the morning when we turned away and for the next 3 hours stood towards the open sea. The sun, when it rose from the ocean, was shrouded in cloud and mist and so it was that we did not see land again until 9 o'clock in the morning. When land could once again be seen its westernmost point bore West $\frac{1}{4}$ N West from us. At this time Boudeuse Peak could only be seen from the masthead. The wind was blowing between north and North N East and we held as close to the wind as was possible in order to make a landfall under the lee of the island. As we made our approach we could see beyond the island's most northerly point and a good distance off and further toward the north, yet more land. However, it was impossible to determine whether this was a new island or whether it was part of the first one we had seen.

During the night of the 3rd and 4th we made tacks to position ourselves more to the northward. The sight of fires burning brightly along all parts of the coast filled our hearts with joy. We were thus certain that this was an inhabited land. As dawn broke on the 4th the growing light enabled us to recognise that what we had thought, on the previous evening to be two separate lands was, in fact, only one; the high sections being joined together by less elevated land curving in an arc to form a bay open towards the north-east. We were running under full sail towards the land at the windward side of this bay when we noticed a canoe coming in from the open sea; she was driving towards the

⁸⁸ This powder, a reduction of the juice of various fruits, was invented by one Sieur Faciot of Paris. It was issued to French naval ships on the instruction of the Duke of Choiseul.-JFF

coastline under the power of both her sails and paddles. She passed ahead of us and was joined by a great number of other canoes arriving from every part of the island. They formed themselves into a group positioned just ahead of us. One of these canoes led all the others; she had a crew of 12 men who were completely naked. They offered to us great branches of bananas and made signs to indicate that these gifts were their offering of peace.

First dealings with the local people.

We responded to them by making every friendly gesture we could think of. When they came alongside the ship one of them presented us a small pig in addition to his olive branch offering of bananas. His appearance was made remarkable by the manner in which his hair had been worked into an enormous creation of spiky bristles which stood out like rays from his head. We accepted his gift which we hoisted on board by means of a line that we threw towards his canoe. We, in our turn, gave them hats and handkerchiefs; they being the first presents which represented our proposed alliance with these people.

Soon more than 100 canoes of different sizes encircled at two ships; all of them were fitted with outriggers. They were loaded with coconuts, bananas and other fruits of the region. They gave us delicious fruits and we in turn gave them various gifts of small value. The trading between us was carried out in good faith but, none of the locals showed any interest in coming aboard the ships. It was necessary either for us to go into the canoes or to show them the objects we were offering in exchange from a distance. When an agreement between us had been reached the items to be exchanged were placed in a basket or a net suspended at the end of a rope. Both the islanders and ourselves gave and received without the slightest concern that the other party might renege on the deal. This was indeed a display of mutual good faith and it augured well for the honesty of their character.

In their canoes we saw no arms of any sort; at this first encounter there were no women present in their company. Their canoes stayed close to the ships until nightfall, until that is, we stood away into the offing for the hours of darkness; at this time all of them returned to the island.

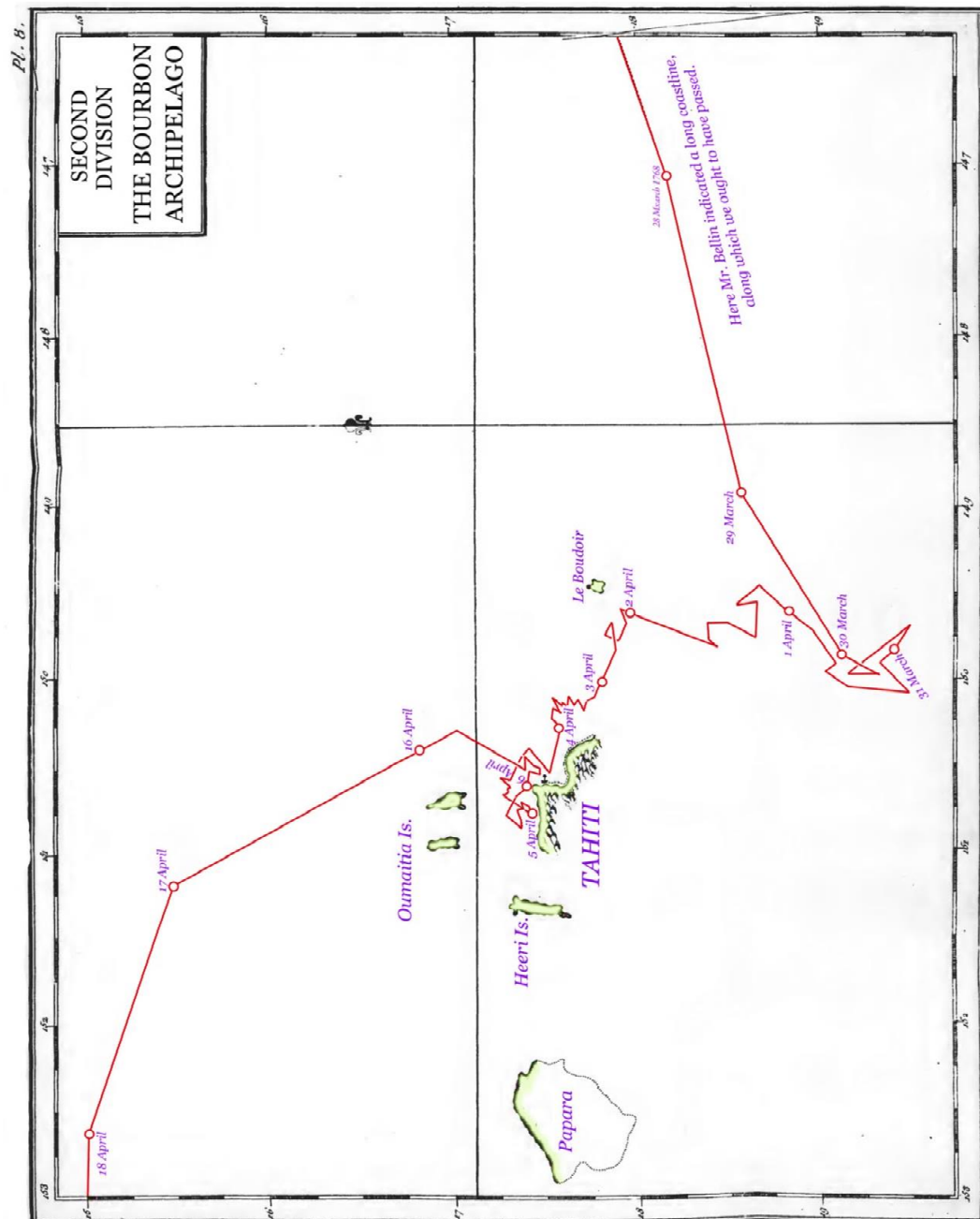
During the night we attempted to make ground towards the north but we never got further than 3 leagues from the coast. Right up until midnight the entire coastal region was lit up, as it had been the night before, by a multitude of little lights set close one from the other. We had the impression that this illuminated display was created by design for some specific purpose. We, in our turn, set off some rockets from both our vessels to accompany their show of lights in the hope it would amuse them.

Description of the coast as seen from offshore.

We spent all day on the 5th making boards in an attempt to get to windward of the island. All our ship's boats were deployed taking soundings in the hope of finding a safe anchoring ground. The view of the coastline around us, elevated like an enormous amphitheatre, was a magnificent spectacle to behold. Although the mountains here are of a great height none of the outcropping rock gives any impression of barrenness. Nowhere was there naked rock to be seen; everywhere everything was clothed in a mantle of trees.

We could hardly believe our eyes when we saw that one of the highest peaks was completely covered in trees right up to its very topmost isolated point. This peak was of an elevation equal to that of the

mountains to be seen in the interior at the southern-most part of the island. This pinnacle appeared to have a diameter of no more than 30 fathoms and the higher it climbed the narrower it became. If one looks at it from afar one would have taken it for a pyramid of immense height that had been dressed with garlands and strands of foliage by the hand of some skilled superhuman florist. The less elevated regions of the countryside are interspersed with areas of meadows and stands of timber. Along the entire length of the coastline, extending back as far as the commencement of the more elevated land there is a border of low-lying and level land covered with plantations. It is here amongst banana, coconut and other fruit bearing trees that the habitations of the islanders are located.



As we continued our way along the coastline we were stunned by the dazzling sight of a magnificent waterfall gushing forth from a great height on the mountains to fall and spend its foaming waters in the sea far below. At the foot of this cascade a village had been constructed and the coastline in its vicinity appeared free of breakers. All of us aboard the two ships having cast our eyes on this beautiful location were gripped by a strong desire to find an anchorage within easy reach of it. We took constant soundings and sent our ship's boats close inshore to extend the survey. We found the seabed everywhere in the close proximity of this village to be of flat rock; consequently, we were forced to search elsewhere for a suitable place to put down our anchors.

We continue trading with the natives.

With the rising of the sun the canoes returned once more to the location where the ships were moored and the entire day was passed in trading with them. New branches of commerce were opened up; besides the types of fruits and beverages that they had brought us the evening before, they now offered us pigeons and other poultry. These people now tempted us with all manner of fishing equipment, axes made from stone, unfamiliar fabrics and shells of many different sorts etc. In exchange for these goods they asked us for iron and earrings. As had been the case on the previous day, trading between us continued in a spirit of fairness and honesty. On this occasion they also had with them in their canoes some very beautiful girls. These lovely creatures were almost completely naked. One of the islanders came on board the *Etoile* and spent the entire night without showing the least concern for his safety.

On the morning of the 6th, having once again put out to sea, we relocated to the most northerly point of the island. From here we could see a second island, but, as there appeared to be breakers in the passage between these two islands, I resolved to go back and try to find a new anchorage in the bay we had seen on the first day that we made our landfall. Our ships boats, while taking soundings ahead and to the landward side of us, discovered that the entire extent of North side of the bay, for about a quarter of a league from the beach, was encumbered by a reef which dried out at low water. However, at a distance of one league from the most northerly point they found that there was a gap in this reef at least two cables wide within which the depth was between 30 and 35 fathoms. Within the reef there was a reasonably extensive roadstead where the depth of water varied between 9 and 30 fathoms.

At the southern extremity of this roadstead they found another reef which ran from the island's coastline and joined up with the reef running parallel to it. Everywhere our boats took soundings within the roadstead they found the seabed to be of sand. They also discovered several small streams very conveniently located for watering ship. At 3 locations, on the northern side, the reef showed itself above the surface of the sea in the form of 3 small islets.

The Anchorage at Tahiti.

On the strength of the reports made by the boat's crews I made up my mind to anchor within the roadstead and immediately we set a course in order to pass through the gap in the reef. As we felt our way through the gap we kept close to the starboard point of the reef; once inside we set our best bower anchor in 34 fathoms of water on a seabed of grey sand, shell and gravel. We also set a kedge anchor to the north-west to enable us to position ourselves for laying our other bower anchor. This would create a mooring so that our two bower anchor cables extended one from the other in the form

of a Vee. The Etoile came in, passed to windward of us and anchored to the North of us at a distance about a cables length. As soon as the ships were lying conveniently to their anchors we unshipped our lower yards and topmasts.

Difficulties encountered while mooring up.

As we made our approach towards the land the islanders in their canoes began to gather around the ships. So great was the number of these small craft that we experienced great difficulty laying out our moorings, so encumbered were we by this numerous and noisy flotilla. As they approached us their crews all cried out "*tayo*", meaning friend. They tried to convey to us, using every possible sign and expression imaginable, the friendliness they felt towards us; at the same time and without pause they shouted out they wanted us to give them nails and earrings.

The canoes were full of women whose faces were as beautiful as those of any European women; their magnificently formed and proportioned bodies would rival advantageously any of their sex no matter who or where in the world. The great majority of these beautiful creatures were completely naked because the men and the older people accompanying them had removed the mantles they usually wore. From the very first, but, only from the sanctuary of their canoes, they made in all innocence coquettish gestures and expressions towards us. Despite their apparent naiveté however, we thought we could sense that they felt in some degree timid and embarrassed at being so flagrantly exhibited in the presence of perfect strangers.

Thus it would appear that everywhere in the world; nature having endowed their sex with the glorious charms of womanhood, it has, in addition, made these qualities more attractive still by endowing them with an innate shyness. And so it is, even in those countries where the mores of the Golden Age still hold sway, womankind, almost by instinct, feign the attitude that they care not at all for that which in truth they desire the most; whilst we men, more crudely made or perhaps more licentious, display our aspirations more clearly and with less hesitation.

The men openly encouraged us to choose a girl and to follow her onto the island; their gestures, the meaning of which it was impossible to misinterpret, only too clearly demonstrated the manner in which they expected us to make their acquaintance. I posed myself the question; how was I to restrain at their places of duty, in the middle of a spectacle such as this, 400 young French sailors who during the preceding 6 months had not even had sight of a woman?

Thus it was, despite all our best efforts and the precautions we took, that one of these young girls managed to scramble aboard and make her way to the quarterdeck where she sat herself down on the hatch coaming just forward of the capstan. This hatchway at that time was open in order to provide free circulation of air to the men working at the capstan bars below. The young girl negligently allowed the mantle covering her to slip from her shoulders and revealed to the eyes of the entire crew the glorious beauty of her young body. This provocative gesture was done in exactly the same manner as when Venus had shown herself to the Phrygian shepherd. This parallel is indeed apposite for every aspect of this maiden was truly celestial. Sailors and soldiers fell over themselves in their haste to encircle the hatchway; never in the annals of all maritime history has any capstan ever been turned with such enthusiasm!

Eventually our efforts to get the sailors under some sort of control did meet with limited success. However, the greatest difficulty I was confronted with at a personal level, and I must freely admit it, was in subduing my own overstimulated amorous inclinations!

My own personal cook was the only member of the crew, despite all the measures we put in place to prevent it, who managed to escape from the ship. His freedom was however, of very short duration; he shortly afterwards returned on board more dead than alive. No sooner had his feet touched the

shore than he found himself surrounded by a horde of islanders. In the twinkling of an eye they had stripped him naked from head to foot. A thousand frightful images immediately flashed into his fearful head for, not knowing what to make of the exclamations made by these people who were noisily and enthusiastically closely examining every intimate part of his body; he thought his end had come. Once their curiosity had been satisfied they gave him back his clothes and put back into his pockets those things they had taken out. Then they led back to him the beautiful girl he had chosen for himself where they encouraged him to satisfy the desires that had caused him to abscond from his place of duty.

The poor man was by this time in such a state of distress that he found performing even this most pleasant duty, albeit under the eyes of dozens of onlookers, utterly impossible. In the end the islanders were compelled to bring this unfortunate cook back to the ship where he addressed me thus, "Sir, punish me as you see fit; for no matter how severely you chastise me you cannot possibly cause me greater fear than I experienced whilst I was ashore!"

Chapter II.

Our stay on the island of Tahiti; good and unpleasant things that befell us there.

We go ashore.

I have already given an explanation of the difficulties we experienced and had had to overcome when we moored at this location. After this tricky evolution had been satisfactorily accomplished I and several of my officers went ashore in order to assess the practicality of watering ship here. We were met by an immense crowd of men and women who took the greatest pains to put us at our ease and to make us feel welcome; the most stout-hearted among them approached close enough to touch us. They even tugged at and pulled aside our clothing as if trying to verify that our bodies were made in the same fashion as were their own. None of them were carrying weapons, not even things as simple as sticks. They made it obvious that if they could have more fully expressed their joy at having us amongst them, then that is what they would have done.

A visit by the chief of the region.

The chief of the region led us to his house and invited us to enter into it; once inside we discovered it was occupied by five or six women and a distinguished looking old gentleman. The women saluted us by bringing their hands up to their breasts and calling out several times *tayo*. We discovered that the old man was the chief's own father. He had about him that air of noble dignity that great age and strength of character sometimes in imprint upon a handsome face. His appearance was made more patrician still by his head of white hair and his long beard. His entire body was taught and well fleshed; his skin was unwrinkled and he exhibited not the slightest sign of decrepitude. This venerable old man affected not to notice or acknowledging our arrival. He appeared to draw back within himself and made no response to our embraces. He showed not the slightest sign of fear, curiosity or astonishment and held himself totally aloof from the expressions of ecstatic welcome our arrival had caused amongst all the other people.

He appeared to be either deep in thought or distracted by cares; perhaps he was somehow intuitively aware that the days of happy and carefree existence on these islands was about to come to an end. To be disrupted and changed forever by the arrival of a different race of men. Might he have thought, in some mysterious way, that his abstracted state might stave off, to prevent from coming to realisation the gloomy prospects he foresaw?

Description of the house.

While we were in the house we were given the opportunity to make a detailed study of its interior. It contained no furniture whatsoever and no ornamentation to distinguish it as the chief's own house. It was only different from all the other simple dwellings in that it was somewhat larger. It was probably about 80 feet long and some 20 feet wide. We noticed that suspended from the roof was a cylinder made of reeds; it was 3 or 4 feet long and decorated with black feathers. There were also two statuettes made of wood; these we took to be images of their gods and goddesses. One of them, the god, stood upright adjacent to one of the house pillars; the goddess faced him. She was leaning against the wall (which she surpassed in height) and was fastened to the reeds from which the wall

was constructed. These figures were clumsily made, their form totally negligent of any proper sense of proportion. Each of them was about 3 feet tall and stood on a hollow cylindrical pedestal which was ornamented with a carved pattern penetrating the full thickness of the cylinder's wall. The cylindrical base was constructed in the form of a tower some 6 or 7 feet high and having a diameter of about 12 inches. The entire construction was made from an extremely hard, black timber.

The reception they gave us.

Having showed us the interior of his house the chief suggested that we go back outside and seat ourselves on the lawn surrounded it. He gave instructions that fruit, baked fish and water be brought to us. During the course of the meal he sent some of the servants to fetch lengths of cloth and two large garlands or circlets made from basketwork covered with black feathers and sharks teeth. We informed him that these objects, to some extent, resembled the immense ruffs that people wore during the reign of Françoise the first. The chief then passed one of these garlands round Chevalier d'Oraison's neck and the other around my own. Lastly he handed out to us the lengths of cloth. When we judged it was time to return to the ship the Chevalier de Suzannet noticed that one of his small pistols was missing; some nimble fingered thief had extracted it from his pocket. We immediately brought the loss to the notice of the chief who straightway instigated a body search of all those of his people who had been in the vicinity. When we saw that some of the suspects were being quite roughly handled we tried to stop the searching. We made known to the chief that our sole concern was that whoever had stolen the pistol could easily become an unsuspecting victim of his own dishonest action and that the theft could easily result in him losing his life.

The chief and all the people accompanied us down to our boats. We had almost arrived at the place where they were beached when a good-looking islander halted our progress and indicated that he wanted us to sit with him on the grass where he was resting. We accepted his invitation, upon which, he lent towards us and sang to us in a charming and delicate voice while accompanied by another Indian playing a slow gentle melody on a flute blown with his nose. It seemed to us that his performance was in the Anacreontic genre⁸⁹; the entire scene was in fact worthy of being depicted by the brush of Boucher.⁹⁰

Our return to the ships was confidently accompanied by 4 of the islanders who ate supper with us and slept on board the ship all that night. While they were with us they sat and listened to music we played for them on the flute, bass-viol and the violin. Later we entertained them with a display of fireworks comprising rockets and fire-snakes. This little exhibition provoked in them a sensation both of surprise and delight, but, intermingled with an element of fear.

On the morning of the 7th the chief, whose name we discovered was *Ereti*, came aboard the Boudeuse. He brought with him, and then gave us, a pig, some poultry and the small pistol which had been stolen the night before while we were in his house. This honest act gave us good reason to feel confident concerning our future relationship with this man and his people.

⁸⁹ Verses in a meter used by the Greek poet Anacreon in his poems dealing with love and wine.- JFF

⁹⁰ A French painter, a proponent of Rococo taste known for his idyllic and voluptuous paintings on classical themes and decorative allegories representing the arts or pastoral occupations.-JFF

Our intention to set up an establishment on shore.

As a consequence we made preparations that morning for the disembarkation of the sick members of our crew and our water casks. It was our intention to leave them on shore under the protection of a small guard. That afternoon I went ashore with an armed party taking such equipment as our project required; we then began to establish our encampment on the banks of a small river where it would be convenient for us to draw water.

Our actions were observed by Ereti who, at first, appeared to show no surprise or indignation at what we were doing. However, several hours later he paid me a visit. He was accompanied by his father and several others persons of rank in the community; they it appeared had complained to the chief about our setting up a camp on shore. It was made known to us, in no uncertain manner, that our intention to stay on shore met with their displeasure. The chief told us that we were greatly respected guests and that during the daytime we were welcome to come and go on shore just as we pleased. During the night time however, we were expected to return and sleep on board the ships. I told the chief that I considered the establishment of a camp on shore absolutely essential because we had an urgent need for water and timber and that I believed it would be a positive step towards cementing good relations between our two peoples.

The chief and his retinue went once again into council and, as a result of their deliberations, Ereti came to me and asked if it was our intention to stay on the island forever, or, if we planned to go away again and when that would be? I told him that it had always been our intention to sail within 18 days. In order that there could be no misunderstanding I gave him 18 small stones so that he could count off each day as it passed. The chief and the elders once again withdrew to discuss what I had told them.

The conditions under which they gave their consent.

They called me and asked me to join them; one of the group, a very serious looking individual, who appeared to have considerable sway in their council, informed me they had agreed to the establishment of our camp but for a period of no longer than nine days. I was insistent that the previous number of days discussed was essential for our purpose; after some time, if somewhat reluctantly, they gave me their consent.

Immediately, our previously happy relationship became re-established; Ereti even offered us the use of an enormous shed adjacent to the river where several canoes were housed; on his instructions, these were straightway removed to a new location.

A camp is set up for the sick and the working party.

We set up several tents beneath this structure where we intended to house the 34 crew members suffering from scurvy; 12 of them were from the Boudeuse and 22 from the Etoile. Several other crewmen, whose duty it would be to care for them, were also posted there. We established a guard made up of 30 soldiers; I had some muskets brought from the ship in order to arm both the work-men and the sick crewmembers.

On the first night I stayed ashore myself and Ereti decided to spend the night in our encampment. He sent for some items of food which we combined with those supper items we had prepared ourselves. He ordered the great crowd of his people who had gathered around the tents to disperse retaining an

entourage of only 5 or 6 of his friends. After supper he asked us if we would set off more skyrockets and when we did so it caused him exactly the same combination of fear pleasure as it had done previously. Towards the end of the evening he sent for one of his wives; she was told to make her bed in the tent of the Prince of Nassau. She was old and she was ugly.

Precautions taken by us: behaviour of the islanders.

We spent the following day completing the work of establishing our camp. The shed, under which it was constructed, was very well built and completely covered with a sort of matting. This site was laid out so that there was only one way in and out. At this entrance/exit we constructed a gate and posted there an armed guard. Only Ereti, his wives and some of his friends had permission to come in; all the other islanders had to remain outside the confines of the shed. It required no more than one of our men armed with a staff in his hand to ensure that they kept their distance. It was at this entrance to our camp that the islanders delivered, from every part of the island, poultry, pigs, fish and lengths of cloth which they offered in exchange against nails, tools, artificial pearls, buttons and 101 other trade-goods; all of it of little value to us, but, to them treasures which were greatly prized by them. Beside their irrepressible appetite for bartering they observed us closely and were quick to discover what they could do to please us. They noticed that we collected anti-scorbutic plants and shellfish; the women and their children enthusiastically brought us bunches of those species of plants that they had seen us collecting. They competed with one another in gathering baskets of every variety of shellfish. We paid them, at little cost to ourselves, for the efforts that they made on our behalf.

Assistance we asked of them.

On the same day I asked the chief if he would show me which of the trees we were permitted to cut down and collect. The low-lying land, where we were located, supported only fruit trees and a species of gum tree the timber of which was of little substance. The hardwood on this island is obtained only in the mountainous areas. Ereti made a mark on those trees we were allowed cut down and he even indicated in which direction he wanted the trees to drop when we felled them. These people assisted us greatly in our work; while our men felled the trees and cut them into logs, the men of the island transported the timber to our boats. Additionally, they helped us to fill our water butts and to transport them to the ship's boats. We paid them with nails; the number they were given corresponding to the amount of work they had achieved.

We had only one small concern, regarding the help they gave us and it was that we had to keep a very close eye on every single item we brought ashore from the ship. Not to have done so would have meant its certain loss. In the whole of Europe there are no people who are more accomplished thieves than are the inhabitants of this island!

Precautions taken for the prevention of thefts.

It appeared to us however, that thievery was not a trait common or engrained in their society for all their possessions stand either on the ground or are hung up. Nothing is under lock and key, doors are left unbolted and there are no guards ever posted to protect property. We were convinced that this out of character behaviour was simply their irresistible urge to possess objects they had never seen

before, things that had simply provoked their natural curiosity. Also, and this cannot be denied, every country in the world has its share of malefactors.

Thefts had occurred on the first two nights we spent on the island, and this was in spite the sentinels and patrols we had established to prevent it. We even resorted to throwing stones at the culprits when we saw them! The thieves often concealed themselves amongst the reeds and other vegetation in a marsh which extended to the rear of our encampment. We cut down an area of these reeds and I gave instructions to the officer of the guard to shoot at any thieves who tried to make an approach in the future; this rather extreme action being taken on the recommendation of Ereti himself. He, however, made very sure of his own safety by repeating to us, several times over, exactly where his house was situated. He stressed that we were only to fire in the opposite direction. As an additional precaution, every evening I deployed 3 of our ship's boats armed with swivel-guns and blunderbusses, they were instructed to position themselves in front of the camp.

Customs particular to this location.

Notwithstanding the light fingered inclinations of a few of the island people, we all rubbed along together in the most amicable fashion. Every day our crew members walked around the island sometimes in small groups often quite alone and unarmed without fear of being molested. They were often invited to enter into the houses where they were offered food; the master of the house never limiting his generosity and always providing a substantial repast. Furthermore, it was not only food that was offered; invariably there were also young girls available on the menu.

On such occasions the rooms in which "the entertainments" were taking place would be immediately filled with a crowd of curious men and women who formed themselves into a circle around their fortunate guest and the young lady chosen to provide the hospitality. The ground surrounding the couple was then strewn with foliage and flowers while their singers, accompanied by flautists, chanted caressing songs of love and pleasure.

In this place Venus is the goddess of hospitality and her cult is worshipped in the most public and unembarrassed manner. On every occasion when a man and a woman make love to one another the pleasure taken is enjoyed by everyone and celebrated as a joyous festival by the entire nation. They found it impossible to understand either the acute embarrassment we experienced at such public displays of sexuality or to comprehend the moral philosophy which, in our society, prohibited it. However, it would be misleading of me to say that none of us found it impossible to overcome our own scruples or that it was only a few of us who willingly, and without hesitation, slipped into the pleasurable customs which are, on this island, no more than one part of normal everyday life.

The interior beauty of the island.

On several occasions, in the company of the second or third officer, I took a long walk into the interior of the island. It always seemed to me that I had been transported into the Garden of Eden. We would wander through meadows filled with beautiful fruit trees amongst which meandered small streams the sparkling waters which imparted upon the atmosphere a delicious coolness and freshness without provoking even the slightest inconvenient increase in humidity.

In this well-populated paradise the fortunate inhabitants have only to languorously stretch out a hand in order that they may enjoy the benefits and blessings of green and munificent nature. Often we came across groups of men and women sitting together in their shady orchards; they would call

out to us from their grassy couches cheerful and friendly greetings. Whenever we met people walking along the pathways they would courteously step to one side that we might pass without inconvenience. Wherever and everywhere we looked we saw hospitality, relaxation, joy in simply being alive and every possible outward expression of happiness.

Gifts of poultry and European seeds we presented to the chief.

I made a present of several breeding pairs of turkeys and ducks to the chief of the locality where we had established our encampment; it seemed to us the most helpful way of expressing our gratitude for all the kindnesses they had bestowed upon us. I also suggested to the chief that we create a garden in the European style wherein we would sow seeds of non-indigenous plant species. This was an idea that they greeted with all-round joy.

Within just a few days the ground had been cleared of weeds and a fence constructed which completely encircled the plot of land the gardeners had selected for this novel project. We showed them how to dig the ground and they all greatly admired the gardening tools we provided for their labours. They already had small plots for growing kitchen vegetables around about their houses where they grew several types of gourd, a type of potato, yams and other species of tuberous vegetables. We made plantings of wheat, barley, oats, rice, maize and onions, on their behalf, and, in addition, sowings of many different varieties of garden produce. We have every good reason to believe that these plantations will be most carefully tended for it became obvious to us that these people had an innate love of agriculture. It is my firm belief that they will without any difficulty soon develop the techniques needed for the exploitation of what can only be described as some of the most fertile ground in the world.

Visit of the chief from the adjacent region.

During the first few days we spent at the island we were honoured by a visit from the chief of an adjacent region. He came aboard the ship bringing with him gifts of fruit, pigs, poultry and lengths of fabric. This dignitary was named *Toutaa*; his face was exceedingly handsome and he was extraordinary tall. He was accompanied by a retinue of his relatives, the great majority of whom were not less than 6 feet tall. I made him presents of nails, tools, paste pearls and lengths of silk cloth. Subsequently, of course, it became necessary for me to return his visit and, on this occasion, I was kindly received by the honourable *Toutaa*; he offered me one of his wives who was both young and extremely beautiful. A great crowd of people had assembled for my visit to the chief; his musicians had already started to play the sensuous melodies with which they like to accompany their spectator sport⁹¹ of their love-making. Such we discovered was their accustomed manner for conducting visits of a ceremonial nature.

Murder of an islander.

On the 10th one of the islanders was killed. Several members of the community visited me claiming and complaining that his murder had been at the hands of one of our ship's crew. Without delay I

⁹¹ Unfortunately de Bougainville is silent upon the outcome of this encounter; he would, after all, be pretty sure that his dutiful wife would feel herself obliged to read his book! -JFF

sent an officer to the house where the body had been taken. His report confirmed that the death was without any doubt the result of a gunshot wound. However, none of our men had been given leave to go out bearing arms either from the ship or from within the fenced off area of the encampment. Despite my making most detailed and searching enquiries I failed to discover the perpetrator of this infamous assassination. The islanders however, must have been of the opinion that the murdered man had committed some crime and, thus, had met no more than his just deserts for they continued to pay us visits in our encampment with their accustomed air of trusting insouciance. It was reported to me nonetheless, that many of the villagers had moved away into the mountainous area and had taken all their belongings and furniture with them; even Ereti's own house, had been taken away. By way of extending an olive branch I gave Ereti yet more presents. This gesture caused the good chief to resume his customary and sincere friendship towards us.

Loss of anchors; dangers we are subjected to.

Notwithstanding the fact that during our stay on the island we had been given all the assistance we could wish for, I pressed ahead to complete all the necessary work as quickly as was possible. I was all too aware that we were in an anchorage that fell far short of what could be considered secure. It so turned out that, even though we had under-run our anchor cables every day and had not detected any sign of fraying or chafing, we had discovered the seabed beneath us to comprise largely of coral heads.

An additional concern was that if it came on to blow strongly from the offing we had little room to manoeuvre or to make sea-room between us and this hazardous coastline. Necessity had forced us to moor in this location, a more suitable anchorage being unavailable. We had been here only a short time when it became all too apparent that the concerns we felt for the security of our position were all too well founded.

At five o'clock in the morning on the 12th, the wind having gone round to the south, the most southeasterly of our cables and also the hawser of the kedge-anchor that we had laid out towards the East S East in order to improve the security of our mooring, both parted where they been in contact with the seabed. Immediately, the frigate began to swing to the cable of our north-easterly anchor causing us to drift down onto the Etoile and collide with her port side.

Details of the action taken to save ourselves.

Without delay we veered cable in order to disengage and distance ourselves from the Etoile; we were most fortunate for this evolution prevented any damage to either of the ships. The store-ship passed to us the end of a kedge-anchor hawser, one that she had previously set out towards the East of her. We laid back and veered out on the hawser in order to increase the distance that separated the two ships. When this had been accomplished, we weighed our bower-anchor and then recovered the severed kedge-anchor hawser and the bower-anchor cable. This last, had parted 30 fathoms from where it had been bent to the anchor ring. We sent to the Etoile for the spare 2700 pound anchor stored in her hold. Upon receipt of this anchor we bent on to it the end-for-ended recovered cable. Our south-easterly anchor had been laid without an anchor buoy because of the great water depth and, as a consequence, it was lost to us for ever. The anchor buoy that had been attached to the lost kedge-anchor had sunk; we made several attempts to drag for it but we were unsuccessful due to the

nature of the seabed. We immediately hoisted aloft our fore-top-mast and fore-yard in order that we were ready to sail without delay when the wind became suitable.

During that afternoon the wind dropped away completely and then went round to the east. We laid out both a kedge-anchor and the spare anchor we had received from the Etoile toward the south-east and I sent one of the ships boats to take soundings to the north of us to determine whether there was a passage by which we could make our way out of the lagoon, irrespective of wind direction.

Murder of three more islanders.

Troubles never come as single spies, they come in battalions. Whilst we were engaged in these activities, upon which the safety of the ship depended, news was brought to me that three of the islanders had been bayoneted in their houses and were either dead or severely injured. My first thought was that this would result in us soon having a hoard of furious warriors about our ears. The situation we were found ourselves in held the unenviable and imminent prospect of a confrontation breaking out on shore coinciding with natural circumstances causing both our ships to be in serious danger of running aground.

I went ashore and entered the encampment where, in the presence of the chief himself, I had the four soldiers, who were suspected of committing this dreadful crime, put in irons. This positive action appeared to reassure the islanders and convince them that the outrage would not go unpunished.

Precautions taken to avoid consequences that might result.

I spent part of that night ashore and increased the number of guards for I feared there was a high risk that some of the people might attempt to avenge the murders of their compatriots. Fortunately, our encampment was located in an easily defended position between two streams separated from one another by a distance of no more than a quarter of a league. To the front of the camp there was an area of swampy ground and to our rear we had the ocean, over which we were confident we exercised complete control. In fact, we had the defence of this post within our capability even if the entire population of the island should rise up in arms against us. Happily, even though there were several alerts occasioned by prowlers on the lookout for something to steal the entire night passed as peacefully as we could have wished.

More dangerous situations faced by our ships.

For the moment I did not consider that the risk posed by being attacked by the islanders was the greatest threat we were facing. My main concern was that we might lose one of the ships by grounding on this coastline and this dreadful possibility most cruelly filled all my waking and my sleeping hours.

At 10 o'clock that evening the wind began to increase in strength from the easterly quarter and was accompanied by a heavy ground swell, driving rain and squalls. The rapidly deteriorating weather had about it a most disturbing character adding considerably to the already dangerous situation we were in. Our unenviable predicament provoked in my heart a most horrible foreboding and sense of despair.

Just before two o'clock in the morning a sudden squall pressed the ship even closer towards the shore and I immediately returned on-board. Fortunately, this squall was only of short duration and soon

afterwards it had passed us by; the wind direction then once again started blowing from the land. The coming of the dawn brought us new difficulties; our north-west cable parted and a short while afterwards the hawser we had taken from the Etoile, now attached to her kedge-anchor, met the same fate. This situation caused the frigate to swing round on the hawser of her south-westerly anchor and we soon found ourselves less than a cables distance from a shoreline upon which the sea was breaking furiously.

The more dangerous our situation became the more rapidly our resources to deal with it diminished. The two anchors, whose hawsers had failed, were entirely lost to us because their marker of buoys had disappeared. Either they had sunk or had been stolen by the inhabitants of the island during the hours of darkness. During the last 24 hours we had been deprived of a total of four anchors⁹². This, however, was by no means the end of the losses we were ultimately destined to suffer.

At 10 o'clock in the morning the new hawser we had secured to the Etoile's 2700 pound anchor and which was holding us from the south-east also parted. The frigate, now secured to the ground by no more than a single hawser, inevitably began drifting towards the shoreline. We immediately let go of our last remaining bower anchor but, it being directly underfoot, its capability to hold and save us was not something we could rely on with any degree of certainty.

Now that had we veered out sufficient cable, for the anchor to effectively deploy, we were so close to the breakers that we thought we were certain to go aground. We were of a mind that at any moment our hopes and expectations for this expedition were about to be dashed to pieces on the rocks of this all too close coastline. Then, unexpectedly, a south-westerly breeze sprang up restoring our hopes that we would now be able to claw our way to seaward.

Straightway we set our jib-sails and the ship began to respond to the wind. We attempted to set more sail whilst veering the bower-anchor cable and the hawser of the kedge-anchor but almost immediately the wind began to go round once more to the east. Fortunately, this brief respite gave us the opportunity to bring inboard the end of the Etoile's second kedge-anchor hawser which had been set to the east of us. For the moment, at least, this proved to be our salvation for we swung to the two kedge-anchors and managed to put some distance between ourselves and the shore.

We sent our barge over to the Etoile to give assistance to her crew in making sure that she was securely moored. By great good fortune the seabed where she had laid her anchors had far fewer coral outcrops than the location where we had moored. The security of the ships having been achieved our barge went over to where the 2,700 pound anchor lay, recovered it by means of its buoy rope and bent a new hawser onto it. This anchor was then re-laid off to the north-east; next, our boat's crew recovered the kedge-anchor that we had obtained from the Etoile.

During the course of these 2 days Mr de la Giraudais, the commander of the store-ship, played a most important role. It was in no small measure due to the unstinting help he gave me that the survival of the frigate was achieved. It is with great pleasure and gratitude that I pay tribute to this outstanding officer, who having also been my companion on previous voyages, has at all times demonstrated a degree of zeal that is in every way the equal of his competence.

⁹² At least one of the Boudeuse's anchors was later recovered by the islanders. James Cook bartered for it, having himself lost an anchor. See page 284, *Captain Cook – His Life, Voyages & Discoveries.* – William HG Kingston. -JFF

Peace is restored with the islanders.

With the coming of the following day we were dismayed when not a single Tahitian approached our encampment. None of their canoes were to be seen on the ocean and all their houses, in our vicinity, seemed to have been abandoned; the countryside around us appeared to be as a desert. The Prince of Nassau accompanied by only 5 or 6 men set out to explore the region beyond our encampment with the intention of locating the villagers. At a distance of about a league from the camp he found a large group of them in the company of Ereti. The moment that the chief recognised the person of Mr De Nassau he approached him but was obviously not at his ease. The women in the group fell tearfully to the ground and clung to his knees. They smothered his hands with kisses, sobbingly and repeatedly cried out to him: *Tayo maté* (you are and our friends and yet you murder us). By dint of embracing them affectionately and making towards them every possible gesture of friendship we managed to win them over and to once more gain their confidence. I noticed coming from the direction of the shore a large group of people heading in our direction; they brought with them offerings of poultry, coconuts and great branches of bananas, it was a sign and confirmation that peace between our two peoples had once again been restored.

Without further delay I sent orders to the ships that suitable gifts be immediately brought ashore. I presented the chiefs with an assortment of lengths of silken cloth and a selection of tools as a token of the pain and sorrow I felt resulting from the awful events of the previous evening. I assured the chief that the villains who had committed this evil deed would be most severely punished.

These good people immediately caressed us and heartily applauded the restoration of good relations between us. In no time at all everything was back to normal. Even the familiar light fingered rascals were back on the prowl, chancing their luck at picking up whatever was not bolted down or carefully guarded. The customary festive atmosphere had been restored and it was as if nothing had ever been amiss between us. On this day and upon the following one they lavished even more food and drink upon us than they had done previously. They asked us if we would give them a demonstration of musketry; we were happy to oblige; but, in the event, this display terrified them as every one of the animals we used as a target was knocked over, dead as a door-nail.

The Etoile sets sail.

The ships boat, which I had dispatched to make a survey of the northern coastline, returned with the heartening news that they had found there an excellent passage. Unfortunately, it was already too late that day to take advantage of it, for night was almost upon us. Happily, the peaceful situation that now reigned on shore was echoed in the calm conditions that existed at sea.

On the morning of the 14th, the wind being from the east, I gave orders to the Etoile, she having already completed watering ship and with all her crew being back on board, to set sail and make her way out of the lagoon by means of the newly discovered northern passage. We ourselves were obliged to wait until the Etoile, who was moored to the north of us, had weighed and cleared the passage.

By means of a spring made fast aboard the Boudeuse she swung herself to meet the breeze and at 11 o'clock away she sailed. She left behind one of her ships boats and two small anchors. As soon as her sails took the wind I recovered the end of the cable and lifted her south-easterly anchor from where it had been set in the excellent holding ground. This evolution completed, we weighed our own bower-anchor and re-laid both of the kedge anchors further out and on better ground so that we were now

riding on two heavy and of three smaller anchors. By two o'clock in the afternoon we had the satisfaction of seeing that the Etoile had successfully made her way beyond the reef. With the completion of these improvements to our mooring, our situation was now a great deal less hazardous.

Seeing that at least one of our ships was beyond immediate danger we considered that we now had a better than average chance of eventually returning to our native land. The Etoile safely outside the reef Mr de la Giraudais sent his barge over to me with the Mr Layari Leroi who had been tasked with carrying out the survey of the passage.

All that day and for part of the night as well, we spent watering ship, dismantling the hospital and bringing back onboard everything from our encampment.

Inscription buried.

Close to the shed, where our encampment had been constructed, I buried an act of taking possession inscribed on a slab of oak; it was accompanied by a tightly sealed bottle containing a paper upon which had been written the names of all the officers of the two ships. In the future course of our voyage I was to follow this same procedure at all the territories we discovered.

It was after two o'clock in the morning before everything and everyone was got back on board. That night the weather again became quite tempestuous and in spite of the number of anchors that had been set we were caused yet further anxiety.

The Boudeuse sails; she faces yet more perils.

At six o'clock on the morning on the 15th under a stormy sky, the wind being off the shore, we weighed our anchors. The Etoile's cable was veered away; we cut one of the hawsers, veered out on the two others and set our fore-sail and our two top-sails in order to make our exit via the easterly passage. We left behind the two barges in order to recover the anchors. As soon as we were beyond the reef I sent the two ships boats with a party of armed men, under the command of the Chevalier de Suzannet, and a Marine Ensign, to protect the two barges while they were engaged in the recovery of the anchors. We had reached a position a quarter of a league outside the reef and were just starting to congratulate ourselves on getting clear of a mooring at which we had been caused so much trouble and anxiety; when, all of a sudden, the wind dropped away to a dead calm and the tide and the easterly swell began to push us back towards the reefs on the leeward side of the passage.

Up until this moment the worst possible outcome of being shipwrecked was that we would have to spend the rest of our lives on an island blessed with all the gifts that nature could provide, Even if that meant exchanging all those things we loved in our native land ours would be a life of peace and ease, free from all cares in this bountiful tropical paradise. But, now, the imminent prospect was of being shipwrecked with the probability of a more sinister fate altogether. Relentlessly the ship was pressed closer and more rapidly towards the reefs. We were aware that, in the present state of the sea, the ship would break apart within minutes of striking. I doubted whether any of the crew, other than a few of the most powerful swimmers, would manage to struggle ashore. The instant this most dangerous of situations developed I had signalled to the barges and the ships boats to take us immediately in tow and they reached us when a mere 50 fathoms of water was left between us and the reef. At the very moment, when our situation appeared to be desperate beyond hope (especially as we had no anchors and thus lacked the possibility of being able to moor), a breeze from the west

suddenly got up restoring to us the possibility of salvation. Indeed, little by little, the wind began to freshen and by nine o'clock that morning it had carried us clear of all danger.

Departure from Tahiti; losses we suffered there.

Without further delay I again dispatched the ships boats to attempt recovery of our anchors; then we stood off waiting for them to re-join us. That same afternoon we joined company with the Etoile and at five o'clock in the evening the barge with our bower anchor attached to the Etoile's cable on-board, came alongside us. Our ships boat and that of the Etoile and her barge re-joined us a short time afterwards. They brought with them one of our kedge-anchors and one hawser. The recovery of the other two kedge-anchors that same day was prevented by the onset of night and the utter exhaustion of the boats crews.

I had intended to lie offshore that night in order that the boats might make a second attempt to recover the anchors the following morning. Unfortunately, at midnight it began to blow a hooligan from the East N East and I was compelled to re-embark the ship's boats and to make sail in order to put a comfortable distance between us and this hazardous shoreline. The long and the short of it was that our nine day anchorage had resulted in the loss of six anchors. This was something that could have been easily avoided had we been equipped with iron anchor cables. It is incumbent on all future navigators to pay close heed to this recommendation.

The islanders express regret at our departure.

Now that we had successfully ensured the security of the ships let us pause for a moment in order to take our leave of the islanders. With the coming of the dawn, indeed as soon as it became light enough for the islanders to see our preparations for setting sail, Ereti, all alone, leapt into the first canoe he came to on the shore and came out to the ship. On coming inboard, he embraced each and every one of us for several moments with tears streaming down his face. He was most obviously deeply moved because we were leaving. Shortly after the arrival of Ereti his personal ceremonial canoe came alongside loaded with every imaginable type of refreshments.

One of them joins the crew at his own request and at the behest of his people.

All of his wives were also on board and accompanying them was the same islander who, on the day we first made our landfall at Tahiti, had come aboard and since then had made the Boudeuse his second home. Ereti took him by the hand and presented him to me saying that this man, whose name was Aotourou, dearly wished to accompany us on our voyage and begged me to approve his joining the crew. He then introduced him to all the ship's officers in turn saying that the man was his friend and he wanted to entrust him into the care of his other friends. He was at great pains to give a glowing account of the man's good qualities. We then gave many different presents to Ereti, on this ceremony being completed, he took leave of us and resumed his place amongst his wives in his canoe. These wives had not ceased wailing and weeping for one moment during the entire time they had spent alongside us. There was also a young and particularly beautiful young girl in the chief's party. The islander, whom we had agreed would accompany us, took her into his arms and presented her with the three pearls he had been wearing in his ears. He kissed her once more and, in spite of the

tears she was shedding so profusely, forced his young wife or lover, we know not which, from his embrace and clambered back on board.

Thus it was that we said our goodbyes to these good people; we were as much surprised by their sadness our imminent departure was causing them, as we had been by the affectionate confidence they had displayed towards us upon our arrival.

CHAPTER III

Description of the newly discovered island.

Customs & character of its people.

Lucis habitamus opacis,
Riparumque toros & prata recentia rivis
Incolimus. VIRG. Lib. VI.⁹³

Tahiti's geographical position.

The island, which we had at first given the name New Cythere (*Nouvelle Cythere*), was called Otahiti by its inhabitants. Its latitude was obtained, at the position of our encampment, by means of several sun sights taken with a quadrant. Its longitudinal position had been determined by 11 observations of the Moon in accordance with the method of horary angles. Mr Verron had, in addition, made many other observations on the island during the four days and four nights we had passed there and had been able to confirm the accuracy of the longitude.

Unfortunately the notebook into which the record of these observations had been committed had been stolen. The result of this loss being that the only records we had retained were those of the observations we had made the evening before our departure. We believe the average of these readings is reasonably accurate, notwithstanding the fact that the difference between the most extreme of these observations was 7° to 8°⁹⁴.

The loss of our anchors and all the accidents I have described previously required us to leave this location much earlier than we had intended and made it impossible for us to make a more detailed study of the coastline of this island. In fact, the most southerly part is quite unknown to us. That part, from the south-easterly to the north-westerly point, along which we sailed I estimate to have an extent of about 20 leagues; the coast between its principal points is oriented towards the north-west and the West N West.

A better anchorage than the one in which we had moored.

In between the south-easterly point and another large cape extending northwards, and 7 or 8 leagues further on, there is a bay which is open to the north-east having a breadth of some 3 or 4 leagues. The terrain on either arm of this bay is quite low-lying and descends gently down to the coastline. At the centre of this bay the hinterland is a little more elevated and appeared to us the most beautiful of all the regions of the island we had seen. It was also the most densely populated. Upon a casual examination of the bay we considered that it would be not difficult to find several good mooring

⁹³ In no fixed place the happy souls reside, in groves we live and lie on grassy beds, by crystal streams that murmur through the meads. Translation by Dryden.-JFF

⁹⁴ Strangely, Bougainville does not give the actual longitude deduced from the observation he refers to. The approximate position of the encampment, deduced from the anchorage marked on Bougainville's chart where the observations were made is, approximately, at longitude 149° 7' W, latitude 17° 38' S. Somewhere near modern day Mahaena. -JFF

locations here. Fortune had served us unkindly in causing us to select the place we had moored before discovering this one. As we made our entrance into the bay, from the passage by which the Etoile had made her exit from the lagoon; I was assured by Mr de la Giraudais that between the two most northerly of the islands there was anchorage sufficient for at least 30 vessels permitting a league of sea-room; here there was never a heavy swell and the water depth was 23, 12 and 10 fathoms on a sea bed comprising muddy grey sand. Beyond the extent of the bay the coastline was more pronouncedly elevated and appeared to be bordered almost everywhere by an off-lying and unequally submerged reef. In places the coral broke through the surface of the sea to form small islets upon which the islanders burned fires during the night to attract fish and to serve as marks for the safety of their vessels.

Here and there along the length of the reef there are gaps giving access to the shore but, when using them it is essential to verify sufficient water depth exists. When sounding are taken here the lead returns only grey sand; it is sand that forms a covering over massive hard and sharp coral heads capable of cutting through an anchor cable in a single night; as we had, unfortunately, been made only too well aware and, at no little cost to ourselves.

Beyond the most northerly point of this bay there exist no inlets or promontories to speak of. The most northerly point ends in a region of low-lying land in the north-west where, at a distance of about a league, we could see a low-lying island extending about 3 leagues towards the north-west.

Appearance of the terrain.

The height of the mountains in Tahiti's interior is quite surprising and contrasts strongly with the relatively small size of the island. However, far from giving the island a sad and wild appearance these mountains serve to embellish the landscape by bringing under the eyes a different prospect with every step taken. It is a land everywhere covered with the rich lushness of nature's bounty; everything luxuriating in such magnificent disorder that the art of man could never imitate.

From these lofty peaks descend a countless number of small streams; not only do they irrigate and fertilise the ground but serve also all the island's practical requirements while at the same time enhancing the beauty its landscape. All the level ground, from the seashore right up to the mountains, is given over to the cultivation of fruit trees, under these, as I have previously remarked, the Tahitians scatter their houses in a fashion that seems to be without plan or design; certainly not in a manner that could be considered a village. One could believe oneself to be at once amongst the Elysian Fields. There are footpaths laid out with practical intelligence which are maintained in the most fastidious manner to provide pleasant and easy communications between all parts of the region.

What the island produces.

The principal items produced on the island are: coconuts, bananas, breadfruit, yams, paw paws, okra, several other tuberous vegetables, fruits indigenous to the locality, a great deal of sugarcane (which is harvested where it grows in the wild state), a type of wild indigo and plant producing a very beautiful red and yellow dye, the name of which I do not know.

In general, Mr de Commerçon noted that the flora here was very similar to that in the Indies. Aotourou during the time that he spent with us recognised and could name several of our plants and vegetables including a great number of species cultivated in greenhouses by European enthusiasts. The types of trees from which timber suitable for construction purposes is obtained grow only in the

mountainous areas. There is little use made of it other than for the cedar wood which they use in the construction of their larger ceremonial canoes. We also saw they have spears made of a timber which is both dark and heavy, very much resembling ironwood.

For the construction of their ordinary canoes they make use of the trunks of the breadfruit tree. This is a soft timber that cannot be riven and is so full of gum that when worked with the tools it is merely chewed up into a pulp.

There appeared to be no mines here.

With regard to other items of production; although the central parts of the island are very mountainous their slopes are completely covered with trees and other plants; this indicated to us that there was unlikely to be any mineral exploitation carried out here. In any case it was obvious to us that the islanders had no local knowledge of metals for they gave the same name, *aouri*, to each of the different types of metal that we showed them. It was this same name that they used when they asked us to give them iron; a commodity they had obviously seen before our arrival. We made conjectures as to how their familiarity with iron came about; a little later on I will reveal my thoughts on this subject.

There are beautiful pearls here.

Here in Tahiti there is but one highly prized and valuable item of trade; the extremely beautiful pearls which the wives and children of the aristocracy wear in their ears. During the time that we spent on the island they took great pains to keep them hidden from our sight.

They also use the shells of the pearl oysters from which they make an instrument resembling castanets, these they use to accompany their dances.

Animals of the country.

We saw there no quadrupeds other than pigs, a small but quite attractive species of dog and rats without number. The local people have domestic poultry which are in every aspect the same as our own. We also saw pretty greenish coloured turtle doves, large pigeons with beautiful royal blue plumage (these incidentally were exceptionally good eating) and very small parakeets or budgerigars with a plumage of the most striking mixture of red and blue. The pigs and poultry here are fed solely on bananas.

Amongst the foodstuffs we consumed on the shore, or, had embarked into the two ships by way of trade, were some 800 head of poultry and close to 150 pigs. Had it not been for all the mooring associated activities we had been forced to undertake during the last few days; the quantity would have been even greater for, with every day that passed, the amount of refreshments the islanders brought to us increased markedly.

Meteorological observations.

During all the time we spent in Tahiti we never experienced excessively hot temperatures; our Reaumur thermometer never went higher than 22° and most of the time it registered around 18°. The sun at this time was, of course, already between 8° and 9° on the other side of the equator.

This island possesses one other inestimable advantage; it is not infested with those legions of troublesome insects which cause so much discomfort and irritation in the majority of tropical countries. Additionally, we never saw there a single venomous creature.

The excellence of the climate and the robustness of the inhabitants.

The climate is especially healthy; in spite of the physically demanding labour our crews were obliged to undertake whilst exposed to the full heat of the sun, despite them being often immersed in the sea and obliged to sleep on the bare earth under the stars; not one single man fell ill. Those of the crew who had previously been suffering from scurvy and had been hospitalised on shore made the most remarkably rapid recovery, to the extent that many of them returned on board completely restored to good health and strength; this in spite of the fact that their nights on shore were anything but tranquil.

The salubrious nature of the climate here is most remarkably demonstrated by the fortunate inhabitants themselves. They live in open houses exposed to all the winds; they require nothing more than the earth and a scanty covering of leaves to serve them for a bed. They are always happy and often live to a ripe old age without displaying any sign of physical or mental decrepitude. Their appearance is strikingly attractive and they retain a set of perfect teeth to the end of their long lives. What better evidence could there be to attest the health inducing quality of the air they breathe or the manner in which these people pass their daily lives?

What they eat.

Vegetables and fish are their principal foodstuffs; the adults eat meat, but only rarely, the children and young girls never. Their salutary and nourishing diet contributes greatly towards keeping them almost totally immune from illness. I can confirm that exactly the same rigorous conditions apply to what they drink; nothing other than pure water ever passes their lips. To them the mere smell of wine or spirituous liquors causes in them the strongest repugnance; this same aversion applies equally to tobacco, spices and in general to all strong tasting things.

There are two separate tribes on the island.

The population of Tahiti is composed of two totally different races, however, both of them use the same language, have the same lifestyle and appear to mix together completely without distinction. The first of these two races and the most numerous comprises men of very tall stature; it is quite common for them to attain 6 feet or even taller. I have never seen men who are more robustly built nor better proportioned. If one desired a model on which to base a painting of Hercules or Mars one would nowhere find finer examples than here. Their facial features are indistinguishable from those of European peoples, if they dressed as we do and if they were not exposed in the open air to the tropical sun, as at all times they are, their skin colour would be just as white as ours. In general, the people in first group of islanders have black hair.

The people of the second race on the island are of only medium height and their hair is coarse and tightly curled. In colour and in physical appearance there is little to distinguish them from mulattos. The Tahitian who had joined our crew belonged to the second, somewhat less distinguished, of these

two races; but, in spite of this, his father was chief of one of the island's districts. What he lacked in beauty he more than made up for in shrewd intelligence.

Details concerning some of the Tahitian's personal habits.

Some of them allow the lower part of their beard to grow and all of them wear moustaches and shave the upper parts of their cheeks. They never cut their nails with the exception of the middle finger of the right hand. Some of them cut their hair very short; others allow it grow long and wear it tied up on top of their heads; all of them dress both their hair and their beards with coconut oil. I only ever met but one cripple and his infirmity was the result of a fall. Our senior surgeon informed me that he was certain that he had seen traces of smallpox and as a consequence I took every precaution to ensure that none of the men came into contact with any locals who we suspected of being infected.

The clothes they wear.

The Tahitians often go about almost completely naked wearing no item of clothing other than a sort of belt covering their genitalia. The senior members of their society however, wrap themselves in a large piece of cloth which they wear in such a fashion that it hangs down as far as their knees. This type of garment is also the only item of clothing worn by the women who, by dint of feminine guile, somehow manage to give themselves an air so much more alluring than is the case when the same garment is worn by a man.

Tahitian women never go out in the open air without covering their bodies and they always wear a little hat made of cane decorated with flowers to protect their faces from the fierceness of the sun's rays. The result of this is that their skins are far paler than the men's. Their facial features are extremely delicate but their greatest attribute is the beauty of their bodies. On this island their splendid figures, their charming contours remain undisfigured thanks to the carefree life they lead. They know nothing of the 15 years of hard physical labour, the daily grind, that is the lot of the majority of woman everywhere else in the world.

Tattooing.

Another custom they practice to enhancing their beauty and unlike European women, who apply rouge to their cheeks, is to tattoo the small of their backs and buttocks using a dark blue dye. This is both a means of decoration and at the same time serves as a mark of distinction. It is a cosmetic treatment also practised by the men. I do not know exactly how these indelible decorations are created but I believe it is by pricking the surface of the skin and pouring dye, made from the sap of certain herbs, into the punctures, in the same manner as I have seen done amongst the Canadian Indians.

It has often been remarked that the practice of tattooing is frequently practised by people whose style of living remains close to nature. When Julius Caesar first set foot upon the shores of England one of the first things he noticed was the custom of tattooing that had already been established there.

*Omnes vero Britanni se vitro inficiunt, quod cærulium efficit colorem.*⁹⁵

⁹⁵ Literally, "All the British colour themselves with glass, which produces a blue colour"! -JFF

The erudite and ingenious author of *Philosophical Studies on the Native Populations of the Americas* (*Recherches philosophiques sur les Américains*)⁹⁶ has proposed the reason that this form of artistry is practiced in countries where insects, such as mosquitoes, multiply at a prodigious rate, is to protect the recipient against the ill effects of their bites. However, in Tahiti this theory is not supported by the facts, for, as we have said earlier, the islands are totally free of such noxious pests. In my own humble opinion the practice is, as is the case with equally bizarre forms of personal adornment in Paris, nothing more than customary fashion.

Another form of bodily decoration practised here which is common amongst men as well as women is ear piercing for the purpose of inserting pearls or flowers of various species. They always keep themselves scrupulously clean; a practice they rightly consider embellishes their physical beauty. It is their custom to bathe very regularly and never consume food or drink without beforehand washing themselves; they also wash yet again after having eaten.

How they govern and comport themselves.

The character of the people of this nation appeared to us to be both gentle and kindly. They seemed not to have either any history of civil war or any ingrained hatreds toward their own people; notwithstanding, the island being divided up into small regions, each one of which has its own independent chieftain.

It is highly likely that the Tahitians, in their day-to-day relations with one another, practice a system of absolute trust wherein a man's word is considered to be his bond and is never called into question. When they are at home or when they are away, day or night, their houses remain always open.

Everyone gathers fruits from the first tree he comes across and goes into whichever house he pleases. It appears that, concerning all the things essential to life, there is no personal property; everything belongs to everyone and anyone may, without it being questioned, make use of anything.

They are expert thieves who regard everything that we owned to be fair game to their acquisitiveness. However, they were extremely timid and would flee from us at the slightest show of menace.

Notwithstanding this penchant for larceny, their chiefs took an extremely dim view of their petty pilfering and went as far as to press us to kill any of their people who were caught attempting to rob us. This savagery however, appeared not to be their normal practice for Ereti himself never employed such severe punishments. Whenever we reported to him that we had identified a thief he would take immediate steps to secure his capture. It was useless for the miscreant to attempt to flee, he would inevitably be caught. In the pursuit of miscreants Ereti was like a bloodhound, never gave up the chase and always got his man. The only punishment he ever inflicted was a few strokes of the cane and the immediate restoration of the stolen property. I do not believe they could even conceive of a more severe punishment. His innate leniency is perhaps supported by his reaction upon seeing one of our crew members cast into irons for this obviously caused him considerable unease. Nevertheless, I was later to discover that they sometimes resort to hanging thieves from trees in much the same way as happens in our own armies in the field.

⁹⁶ Thought to have been written by the marquis de Pau. - JFF

They are at war with the neighbouring islands.

They are almost constantly at war with the inhabitants of the nearby islands. We observed that they possess large war canoes used to undertake invasions and even to engage in battles upon the high seas. For weapons they make use of bows and arrows, slings and a type of spear made from a dense hardwood. The manner in which they make war upon each other is barbaric in the extreme.

Aotourou described to us the manner in which they conduct warfare was as follows. During their battles they cut off the beards and the skin from the chins of their enemies and bring them home as trophies to celebrate their victory they then kill all the captured men and male children. They carry off the women and female children to be employed as their concubines. Aotourou himself is the son of a Tahitian chief and a woman who had been captured from the island of Oopoa⁹⁷; a neighbouring island and an inveterate enemy of the Tahitians.

The constant state of belligerence that exists in the region is perhaps attributable to the marked difference between the two races of men, as I have mentioned previously. The wounds they receive in their battles are obviously treated with great skill; our surgeons on seeing the scars they bore were full of admiration for the way in which they had been treated. Unfortunately however, I am unable to give any information on the methods they use.

At the end of this chapter I will provide further information concerning: their form of government; the extent of the power their chieftains possess; the differences and distinctions between the nobles and the people and of the bonds that unify this extensive society of sturdy men; all of whom have few needs or problems living as they do under a common and accepted authority.

Important customs.

I should remark at this point that, in the case of delicate situations, the village headman does not make decisions himself but listens to the advice of a council. We noticed that when a matter seriously affecting the community arose, such as when they had to decide whether we were to be allowed to establish our camp; he called together a council of the village elders. I would add, however, that the word of the chief is law and he is obeyed without question by everybody. Other senior members of the society also have their retainers to assist them in those things over which they have been given authority.

Customs relating to death.

It is impossible to go into great detail regarding their religious beliefs; we have seen in their houses wooden statues that we took to be idols, but, concerning the cult, of which they were representations, we have not the slightest idea. The only ceremony of a religious nature that we witnessed concerned the funeral rites they practice. The corpses of those who have passed away are laid out on a sort of scaffold protected from the elements by a canopy and here they are allowed to remain for some considerable time. The stench of decomposition surrounding this site does not in any way deter their weeping women from visiting these graves regularly to anoint the cold mortal remains of their loved ones with coconut oil.

⁹⁷ Oopoa is in fact a harbor on the island of Ulietea NW of Tahiti. -JFF

Those women, with whom who we had become familiar, permitted us to enter into this place that they had consecrated to the spirits of the dead. *Emoé*, they told us (he is sleeping). When nothing remains but the skeleton they remove the bones into the hut formerly belonging to the dead person. I am unaware how long they are retained there and I know only this because I witnessed it with my own eyes. Their funeral rites are solemnly superintended by one of the village dignitaries who wears ornaments of a costly nature about him during this sad occasion.

Superstitions amongst the islanders.

We asked Aotourou many times to give us what information he could concerning the religion they practice; he led us to believe that the people of Tahiti are extremely superstitious and that their priests very powerful and greatly feared. He told us that in addition to the one superior being, who they called *Eri-t-Era*, King of the sun or King of light, (to whom incidentally they make no material images) they believe in several other lesser divinities. Some of these demi-gods were beneficent others malefic; they referred to these divinities or genies as *Eatoua*.

It was their belief that there was both a good and a bad genie watching over every important aspect of their lives. These two powers determined between them whether an action would have a happy or an unfortunate outcome.

One thing that we discovered beyond all doubt was that when the moon was in a particular phase, they referred to it as *Malama Tamai*, meaning the "moon in a state of war". We never learned exactly what the conditions were which determining when this phase of the moon existed or would occur, nor how it influenced their decision to make human sacrifices.

Of all the various customs they practised the one that caused me the most surprise was the way they saluted people who sneezed, by saying to them, "*evaroua-t-eatoua*" ("May the good *Eatoua* not awaken you, or, may the evil *Eatoua* not send you to sleep"). From this salutation it can, perhaps, be seen how modern world superstitions have their origins in the ancient world. So things must remain for, when one attempts to look into the nature of a people's religion, one has to be sceptical and wary of accepting as evidence what is in reality no more than a fleeting glimmer of comprehension.

They have more than one wife.

Polygamy is the general state of relations amongst them; at least it is amongst the nobles. Their only really great passion is love-making; and so it is that the number of their wives is their only measure of wealth and luxury. Both the men and women undertake the care of children. In Tahiti it is not the way of doing things for the men to uniquely concern themselves with fishing and making war and leave the daily household chores and the raising of crops to the weaker sex. Here the women also enjoy a life of ease and pleasure; their sole object and joy in life is to gratify their own and their men's amorous inclinations.

I do not know if their marriage ceremony is merely a civil contract or whether it represents an engagement consecrated by religion; nor am I aware if it is indissoluble or whether divorce is possible. Whichever is the case the women are absolutely submissive to the will of their men; they would pay with their lives if they were found to have been unfaithful; unless that is, their infidelity had been consented to by the man. Such consent, if the truth were to be spoken, is not so very difficult to obtain.

Jealousy here is a sentiment alien to their natures to such an extent that the husband is almost always the one who suggests that she gives herself to a guest of the house. Girls and unmarried women, for their part, feel no sense of shame in giving free rein to their hearts inclination nor, indeed, to the carnal impulses of the flesh. Nor does what would be considered, by European sensibilities, to be licentious behaviour cause them to be in anyway censured. Rather, in fact it is the complete opposite; for their public sexual encounters receive the enthusiastic applause of their admiring audiences. The number and the frequency of their casual intimacies seem in no way to diminish their chances of finding a husband. What reason is there then to resist temptation or to decline the pressing urges the sultry atmosphere in these torrid islands provokes? This is the more especially so when such lascivious behaviour is instigated and encouraged by the example of their peers. The very air one breathes here, the beguiling singing, the dancing (always accompanied by suggestive movements and lascivious postures), unrelentingly beguiles the senses with thoughts and emotions centred upon the ecstasy of lovemaking. Everything gently urges one to submit to the pleasure of self-indulgence. When they dance they do so to the rhythm of a kind of drum; when they sing their voices are accompanied by the sweet music of the three or four hole flute, which as I have already mentioned, they blow using their noses. They also practice a sort of wrestling which is to them both a form of play and of exercise.

Their character.

Their daily life, unremittingly given over to pleasure as it is, imparts upon the Tahitians a marked inclination to display to the world an insouciant irresponsibility and indolence that, to us at least, appeared quite astonishing. Every new thing that they see provokes their immediate delight but holds their attention for no longer than a fleeting moment. Of the great number of totally unfamiliar items we showed and demonstrated to them, not one, no matter how attractive or sophisticated it was, held their attention for more than an instant. I'm convinced they find the mental effort required for reflection or consideration more fatiguing to their spirits than is the most demanding physical labour to their bodies!

Some details concerning their industry.

In what I have said above, concerning their natures, it has not been my intention to imply that they are lacking in intelligence. Their application and attention to detail in the manufacture of those few items it is necessary for them to undertake (because they are not, as are most things, provided freely and in abundance by this bountiful environment and the salubrious climate in which they live) would, in any case, give the lie to such a preposterous accusation.

The manner in which they manufacture their fishing equipment filled us with amazement and respect. Their fishhooks which they fashion from the nacre of certain shells are so finely crafted that they give the appearance of having been manufactured by men with access to sophisticated metal tools. The manner in which they make their fishing nets is exactly the same as we make ours except the thread they use is manufactured from the leaves of a species of agave plant. We greatly admired the manner in which their carpenters constructed frameworks for their enormous houses and the artistry with which they affect their covering with a thatching of palm fronds.

Boat construction.

Their boats are of two distinct types; the smaller ones are of very simple construction being made from a single hollowed out tree trunk. The other sort is very much larger and is worked and finished with great skill. As is the case with the smaller ones, the basic hull from the prow to two thirds along the length of the vessel is manufactured from a large tree trunk; the after section is made from a second tree trunk, curved so that it is elevated five or six feet above the waterline to form the vessel's stern. These two hull sections are joined together in such a manner that, longitudinally, the vessel has the form of an arc. To achieve the assembly of these two subsections no nails are used; the two extremities of each component are pierced and through these holes cordage made from coconut fibre, is passed and lashed in such a fashion as to securely fix the two parts of the hull together. Both sides of the hull are elevated to provide more freeboard by the installation of bulwarks; each of these is about one foot in height and secured to the hull with rope lashings, in a manner similar to that previously described. They caulk the hull piercings and seams with coconut fibres but they do not incorporate any waterproofing materials. The fore part of the vessel is decked over with a plank which projects five or six feet beyond the stem and serves to prevent the craft from burying her nose into the waves when the sea is running high. In order to reduce the risk of capsizing these, somewhat flimsy, craft are fitted with an outrigger on one side. This is nothing more than a single long piece of wood secured to two 5 or 6 foot long transversal beams, the other ends being firmly fixed into the canoe's hull.

When the vessel is under sail a length of timber is extended, outboard of the hull on the opposite side to the outrigger. The purpose of this timber is to anchor a rope guy to support the mast and to provide a platform for either a man or a weight acting as a counterpoise thus making the craft less likely to capsize during sudden gusts of wind.

The Tahitians level of technical ability is particularly well illustrated by their ability to navigate these flimsy craft to neighbouring islands, for which they employ no other aids but the stars above. They secure two of their larger canoes together side-by-side, separated by a distance of about 4 feet by means of several transversal beams fixed securely at both ends into the two hulls. Over the sterns of the two vessels, joined in this fashion, they erect a lightly constructed deck house roofed over with reeds. This construction provides them, their equipment and their provisions protection from rain and shades them from the burning sun. These double hulled canoes are capable of holding a great number of people and their innate stability makes them extremely unlikely to capsize. These are the type of vessels that we saw their chiefs use when going from one part of the island to another, which they frequently do. They can be either sailed or propelled by paddles in exactly the same way as are the smaller canoes. The sails they employ are composed of matting extended on a square framework of reeds one angle of which is rounded off.

For all the various types of work the Tahitians undertake they employ no other tools than a sort of adze, the cutting edge of which is made from a very hard black stone. In all other respects it has exactly the same form as the adzes used by our own carpenters; they display considerable skill in the use of this implement. In order to make holes in timber they employ pieces of shell that have been worked into a sharp point.

Their fabrics.

The method by which they manufacture those particular fabrics they use for clothing is by no means the least of their arts. Their textiles are woven from fibres taken from the bark of a bush grown in the gardens around every house on the island. They take a square block of hard wood into the four faces of which grooves of different depths and widths have been cut. This implement is employed to beat the bark against a flat slab of timber. During this beating-out process they add a small quantity of water which results in the production of a fine tissue of equal thickness which is akin in nature to paper yet considerably more supple and far less easily torn. They are capable of producing this material in very large pieces and in several different qualities; each varying, one from the other, in thickness and all made in exactly the same way from the same materials. I am unaware of the techniques they use for dyeing this material.

Description of the Tahitian who accompanied us into France.

I will bring this chapter to an end with an explanation; simply because some people insist that it is necessary for me to justify my decision to profit from the willingness of Aotourou to accompany us on our voyage. The duration of which I am sure he had no conception whatsoever. Additionally, I will give an account of the information he gave me concerning his own country during the long period he stayed with me.

The reasons we took him with us.

The enthusiasm that this islander exhibited in his wish to come with us was absolutely unequivocal. From the very first day of our arrival in Tahiti he made known, in no uncertain terms, that he wanted to accompany us. What is more, all of his countrymen supported him in this ambition.

It was beyond dispute that the voyage ahead of us would take us through lands and seas totally unknown to us and through regions where our lives would literally depend upon the goodwill and generosity of people, we were yet to encounter, for our supply of victuals and to assist us on those occasions when we needed help. It was for this reason absolutely essential to have with us a native from one of the most important islands in the region. That is not to say we assumed he would be able to speak and understand all their various languages; but rather, because he would be similar to them in customs and traditions. He was, therefore, more likely than were we to be accepted amongst them and this would stand us in good stead in our dealings and negotiations with them.

Additionally, should we discover a nation amongst these the most beautiful countries upon the entire planet and with whom our own country might have much to gain from the formation of an alliance, what better recommendation and assurance could there be than for them to see similar to their own kind united with us and so kindly treated? Someone who, as a result of his association with us, now possessed knowledge that was, potentially, of great benefit to them.

May it please God to grant that the benefit we would gain from his presence and resulting zeal which inspired us to allow him to come with us, never causes the courageous Aotourou the least regret or harm!

His time in Paris.

I spared neither money nor attentiveness to ensure that his days in Paris were both profitable and enjoyable. He spent, in all, eleven months there and during this time he gave no indication whatsoever of being bored. Everyone in Paris was keen to make his acquaintance. But mostly it was the idle curiosity of men who, never having ventured beyond the limits of the metropolis, see nothing in its proper context, but, make mock of everything. There exist some people who invariably form inappropriate opinions and after having positively convinced themselves of the rightness of their own points of view hold their prejudices as proof against all application of common sense.

For an example of this, some of them asked me:

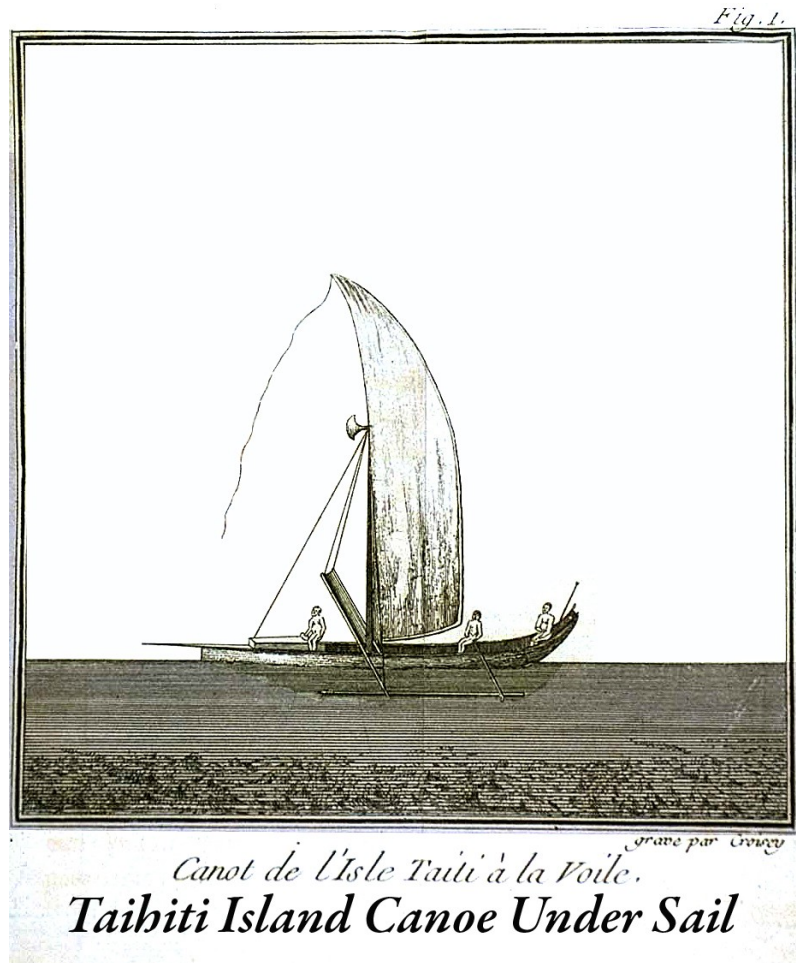
“How is it possible that in the country where this man comes from they speak neither French or English nor yet Spanish”?

How could I reply to them?

I was not, however, on every such occasion rendered speechless or astonished by the stupidity of the questions that people posed. I had become accustomed, since my arrival to learn that several of these same people (who probably considered themselves intelligent) held with the opinion that because I had not been to China I could not have made a circumnavigation of the globe. Others, amongst them sharp tongued critics for the most part, took the

view, and salaciously spread it around, that since the islander during his stay of two years in Paris could still speak no more than a few words of our language must be of a very limited intelligence.

“Do we not see almost every day”, they argued, “Italians, Englishman and Germans who have attained a fluent grasp of the French language after no more than a year in Paris”? I perhaps ought to have replied and, in truth with good grounds, that despite the purely physiological differences that made French pronunciation extremely difficult for him, (an obstacle concerning which I will give an explanation in more detail and little later) Aotourou was at least 30 years old and, during his entire life, had never had occasion to study or to exercise the development of his memory.



Though it is undeniably true that an Italian an Englishman or a German may easily gain within a year the ability to chatter away in passable French; it must be borne in mind that these particular foreigners speak a language of which the grammar is akin to our own. They are physically similar to Frenchman, have similar characters and principles; they are alike in the manner in which they express themselves politically and socially. Thus the only thing their memories, since childhood accustomed to the learning process, have to cope with is the mere translation of the words.

Our Tahitian, on the other hand, has to create an entirely new world of ideas before he can even begin to make sense of the words in our language, expressing as they do concepts totally unfamiliar to him. He has, on the one hand, only a few ideas concerning his own simple society; and on the other hand, he has needs that are of the most basic kind. These conditions, acquired during his previous existence, all conspire, so to speak, to make his reasoning process just as languorous as is his body.

That is the sort of argument I ought to have used when replying to those bigots. However, such an explanation would have required several minutes, but, in reality, bombarded as I invariably was with many other questions, the person who had honoured me with his petulant observation had already disappeared before I could respond.

It is an all too common an occurrence, particularly in capital cities, to encounter people who ask questions, but, who have no interest whatsoever in increasing their own knowledge. They do so rather as self-appointed judges in order to expound their own preconceived views. Their opinions are seldom influenced by what they hear, or don't hear, in response to questions they pose.

Nevertheless, irrespective of the fact that Aotourou's grasp of the French language was extremely limited, he would go out alone every day into the city and there was not a single occasion when he got lost. Very often he did little errands but was seldom cheated by merchants who, without exception, charged him no more than was the proper price.

Of the performing arts the one that particularly pleased him most was the opera and he also passionately loved the dance.

He was perfectly aware of the dates on which performances were going to take place and off he would go, all on his own. He paid at the door, just as did everyone else; he would then take up his favourite seat in the theatre, it was always an aisle seat in the stalls.

Amongst the people who wanted to make his acquaintance, and there was a great number, he would never fail to immediately recognise those who had been pleasant to him and his appreciative heart never forgot them.

He was particularly attached to Mme the Duchess of Choiseul who became his very good friend and took a great interest in his welfare; she bestowed a great many acts of kindness upon him. To the amicable treatment he received from her he was infinitely more grateful than he was for the presents that she also gave him. Whenever he learned that this gentle benefactress was in Paris he would go off, all alone, to pay his respects to her.

His departure from Paris.

He left Paris in the month of March 1770 and travelled to la Rochelle where he embarked in a ship called *le Brisson*; a vessel scheduled for immediate departure to the Ile-de-France⁹⁸. During this crossing he was entrusted into the care of a merchant who was both a passenger in and a part owner of the vessel.

⁹⁸ Now Mauritius.-JFF

The French government sent instructions to the Governor and the Minister responsible for finance at *l'Ile-de-France* that they were to make arrangements for sending Aotourou back to his native island. I, for my part, had provided detailed instructions concerning the best route by which he was to be got there. I also made available the sum of 36,000 francs (being then one third of my total fortune) to purchase his passage in the first available ship bound for Tahiti.

Mme the Duchess of Choiseul had the generosity to provide a sum of money with which to purchase a great quantity of tools, seed-corn and livestock of the kind that would be most beneficial to the people of Tahiti. The King of Spain had agreed that, should it become necessary, the ship transporting Aotourou was cleared to call in at the Philippine Islands.

My fervent wish now is that, ere very long, Aotourou⁹⁹ will be reunited with his countrymen!

And now I will give an account of the customs of the people of Tahiti, as they were explained to me during my conversations with Aotourou.

What we recently learned concerning the customs of the people of Tahiti.

I have previously explained that the Tahitians believe in a supreme being whose image it is impossible to represent as a statue or a picture. However, they also have their lesser divinities; these, as Aotourou explained to me, are considered as being either providential or malicious and these lesser divinities are represented as figures carved in wood. The Tahitians pray at sunrise and sunset; in addition to this they have a great number of superstitious formulae and observations by which they seek to influence the activities of the evil genii. The fact that Aotourou was fully aware of the comet (which had been visible in Paris in the year 1769 ¹⁰⁰), gave me good reason to believe that the Tahitians were completely familiar with these "*stars that do not return until many moons have passed*". The name by which they know comets is "*evetou eave*"; they do not associate their appearance as being harbingers of misfortune.

They do not have the same opinion regarding meteorites which we call shooting stars and are known to the Tahitians by the name of *epao*. Comets are considered by them to be *eatoua tao*; that is to say malefic spirits. Besides which, members of the learned class in Tahitians society (they are not however, astronomers as some of the journals here in France have claimed them to be), have a well-developed nomenclature for classifying the constellations and they understand their diurnal movements. Use is made of many heavenly bodies to guide their navigation; often far from land as they travel from island to island. In the course of these navigations, sometimes over a distance of 300 leagues, they completely lose sight of land. Their compass, during the day is the passage of the sun across the sky, during the night-time it is the position of the stars which, in the tropics, nearly always shine brightly out of a brilliantly clear sky.

⁹⁹ In 1771 Marion Du Fresnes commissioned two ships to transport Ahotourou back to Tahiti. Unfortunately, the first Tahitian to have set foot in Europe, contracted smallpox when the ship called at *Isle de Bourbon* (Reunion Island) in the Indian Ocean. His condition quickly deteriorated and, despite the intensive care he received, he died on October 18 in Fort Dauphin (Madagascar).

¹⁰⁰ This remarkable comet was discovered by Messier, on the 8th of August, and observed by nearly all astronomers. Messier was to make a bit of a fool of himself by seeming to suggest that this comet heralded the birth of Napoleon Bonaparte (born on August 15th 1769).- JFF

The neighbouring islands.

Aotourou mentioned several islands in his conversations with me; some of them were confederated in friendship with Tahiti, but, with others a continuous state of war existed. The islands which are on friendly terms with Tahiti are called: *Aimeo*, *Maoroua*, *Aca*, *Oumaitia* and *Tapoua-massou*; whilst the islands of their enemies were called *Papara*, *Aiatia*, *Otaa*, *Toumaraa* and *Oopoa*. All these islands are the same size as Tahiti. The island that they call *Pare* is renowned for the quality of its pearl fisheries; sometimes this island is on friendly terms with Tahiti but at other times the two islands are at war. There are two other inhabited islands called *Enoua-motou* and *Toupai*; they are both somewhat smaller than Tahiti. This pair of islands is particularly well known for the amount of fruit, pigs, poultry, fish and tortoises that can be obtained there. The Tahitians believe that these two islands are sacred and are inhabited by evil spirits; they fear that some disaster or other will befall anyone who goes there, whether it be out of curiosity or by chance. Almost everyone who ever stepped foot on these enchanted places died under mysterious circumstances soon afterwards.

It is also necessary to mention that these islands lie at various distances from Tahiti. The most remote one Aotourou told me about involves making a 15 day voyage. No doubt this is the distance he thought our country might lie, when he made up his mind to accompany us.

Social inequalities.

I have mentioned previously that the inhabitants of Tahiti gave us the impression that they lived in a state of, greatly to be envied, happiness. We were, at first, of the opinion that all the inhabitants of the island were considered equal to one another. At least they enjoyed the liberty of living within the bounds of laws that had been established for the good of everybody and applied to everyone, irrespective of status. I was, however, soon to discover that nothing could be further from the truth, for the distinction and privileges between the various classes in Tahiti is very marked indeed. The laws and the cruel punishments are applied very disproportionately. The Kings and the nobles enjoy the power of life and death over their slaves and vassals. I would go as far as to say, and truly believe it to be the case, that they exercise total and barbaric control over all the people who are lower-ranking than themselves; these they refer to as *Tata-einou* (lower-class). What is certain is that it is from this group of ordinary people that they draw the victims for their ceremonies of human sacrifice. Meat and fish are reserved only for the tables of the nobility; the common man must content himself with a diet of vegetables and fruit. The division between the various ranks extends so even far as to differentiate between the species of timber that may be used to fuel their nightly fires. The Kings alone are permitted to plant the weeping or Babylonian willow tree in front of their houses; for they have learned that in bending over the branches of this tree and retaining it in contact with the earth it will strike and in so doing extend the shade the tree affords, ad infinitum, in whatever direction they choose. In Tahiti this tree, by virtue of the shelter it provides from the sun, fulfils the function of the King's dining room.

The vassals of the nobles wear their own particular livery. The position in which this class wrap a particular type of textile belt around their bodies depends upon the seniority of the noble. Servants of the chiefs, for example, wear theirs immediately below the armpits while, for those of the least senior amongst the aristocracy, the garment covers only the lowest part of their torso. Generally, their meals are taken when the sun is at its highest in the sky and at again sunset. The men do not eat with the women whose duty it is to serve the food that has been prepared by the vassals.

How they mourn the dead.

It is customary in Tahiti to observe a period of mourning for their dead; this they refer to as *eeva*. Upon the death of the King everyone in the nation goes into mourning. When the father of a family passes away his demise is mourned for a considerable length of time; the same applies to the surviving partner following the passing of a wife or husband. A person who is in mourning displays his grief by wearing a headdress of feathers, the colour of which symbolises death, and a veil completely covering his or her face. When they leave their houses to go about the island they are preceded by several slaves who beat out a funerary song with a sort of castanets; the dismal sound they produce is, in part, to warn everyone to assume a suitably respectful posture. It also serves to provide an opportunity to avoid the procession which they consider bad luck to encounter. Nevertheless, in Tahiti, as almost everywhere else in the world, the marks of respect due to the dead are not always respectfully observed. Aotourou told me that the veil worn during mourning was often used to conceal the identity of “merry widows”, so permitting them to engage in amorous assignations with impunity.

How they assist one another when they are ill.

On occasions when one of them becomes ill, even when the complaint is not serious, all the close members of the family gather in the sick person's house where they stay to sleep and eat. Each of them takes it in turn to look after the patient until the symptoms of the illness abate. They practice bleeding but, unlike us, they do not draw the blood from the arm or the foot. A *Taouma*, that is to say a doctor or a low-ranking priest, strikes the top of the patient's skull with a sharp edged wooden implement and by this means opens up the sagittal vein. Once the required amount of blood has been let he binds up the patient's head with a bandage so closing the incision. On the following day the wound is washed with water.

Remarks on the language.

Now I will tell you some of the interesting things I learned concerning their language; some of this information was given to me in my conversations with Aotourou, some I picked up during the time I spent on the island of Tahiti. As a result I have included at the end of this book a vocabulary of Tahitian words that I have been able to put together¹⁰¹. When we first arrived at this island we noticed that some of the words pronounced by the locals were to be found in the book entitled “Vocabulary of the Cocos Islands”, compiled by *le Maire* after he returned from his voyage to those islands. Indeed those islands, according to the opinions of *le Maire* and *Schouen*, cannot be that far distant from the island of Tahiti. It might well be that they are amongst the islands Aotourou told me about. The language of Tahiti is soft, musical and easy to pronounce. The words of the language are almost without exception composed of aspirated vowels; there are none of the half-spoken, silent or nasally pronounced syllables that make mastering some languages so difficult. A case in point being the incapability of Aotourou to pronounce many words of the French language; because our language (considered unmusical by some), is completely inaccessible to his organs of speech. It is probable that had he tried to learn Spanish or Italian he would have met with more success.

¹⁰¹ Refer to Appendix 1.-JFF

Mr Pereire, celebrated for the work he has done in teaching speech to those who have been deaf and dumb from birth, examined Aotourou on several occasions and pronounced that he was physically incapable of pronouncing the great majority of our consonants or any of our nasal vowels. Mr Pereire prepared for me some comments on the subject and these have been inserted as part of the glossary of Tahitian words to be found at the end of this work.

Whatever the case, I believe the Tahitian language has an adequately large vocabulary. The reasons why I came to this conclusion is because during the course of our voyage Aotourou had no difficulty expressing and describing in words, often in an improvised rhythmical almost poetical cadence, whatever caught his attention. It appeared to us that his language was sufficiently rich to enable him to comment on a great number of objects which he had never previously encountered. Additionally, with almost every passing day we heard him utilise words that were, up until that time, completely unknown to us. One example of this, amongst the many, was a long prayer he referred to as the Prayer of the Kings; of this invocation I had previously only heard one word in ten.

I understood from Aotourou that about eight months before our arrival at his island an English ship had made landfall there; he told me that the captain's name was Mr Wallace. The same stroke of fate that had led us to discover this island, had, while we were still in the River Plate, also brought the English to its shores.

They had remained there for a month and with the exception of one single attack by the islanders (in an attempt to capture their ship), everything had passed off peacefully between the two peoples. It was perhaps from this encounter that they had become familiar with iron. We made the observation that the word the Tahitians have given to this metal, *airon* is very similar in pronunciation to the English word "iron".

I am not aware if, as well as them being indebted to the English for their knowledge of iron, they also have them to thank for the transmission of the venereal disease which is now, as will later, sadly, be seen as a now common scourge on Tahiti.

CHAPTER IV

Departure from Tahiti, new islands are discovered, navigation until

*we pass beyond the Great Cyclades*¹⁰²

We have described in detail how our stay at Tahiti was a mixture of both good and, regrettably, some very unfortunate events. The time we spent there was one of constant worry to us, principally because of the danger we courted due to the poor anchorages to which we had been compelled to resort. But, despite all the problems we had encountered there, the island had been a very good to us and we carried from there many fond memories in our hearts of the friendships we had made.

April 1768

On 16 April, at eight o'clock in the morning, we were about 10 leagues North E $\frac{1}{4}$ North from the island's most northerly point; it was from here that I took my point of departure. At 10 o'clock we saw land to leeward which appeared to comprise three islands; from our current position the extremity of Tahiti could still be seen.

By midday it became apparent to us that what we had taken to be three islands was in fact one larger island the high peaks of which had appeared isolated due to the curvature of the earth and the distance that separated us from them.

Sighting of Oumaitia.

Beyond this newly discovered island we believed we could see yet another even further off. This was island of medium height and completely covered in trees, it could be seen at sea level from a distance of about 8 or 10 leagues. Aotourou said that it was called *Oumaitia*. He told us with great enthusiasm that the people who live there were great friends of the Tahitians, that he had visited the island several times and that he had a mistress there. He assured us that we would be made as welcome there and provided with refreshments to no lesser degree than we had been by the people of Tahiti itself.

The course we took.

Before that day came to an end *Oumaitia* had disappeared below the horizon and I set our course so as to give the Pernicious Islands¹⁰³ a very wide berth, this having been the place where Admiral Roggeveen¹⁰⁴ had previously met with disaster.

Two days later we obtained incontestable proof that the inhabitants of the Pacific Ocean islands maintain contact with one another over very great distances. The crystal clear, cloud free azure sky becomes each night a vast dome in which the glittering stars shine out brilliantly and clearly.

¹⁰² Now Vanuatu, New Hebrides Group.- JFF

¹⁰³ Now The Palliser Islands, named in honour of Admiral Sir Hugh Palliser by Captain James Cook, who was the first European to sight them, on 19 and 20 April, 1774
http://en.wikipedia.org/wiki/Palliser_Islands -JFF

¹⁰⁴ The Dutch Admiral, Jacob Roggeveen (1659 - 1729).-JFF

Aotourou considered the heavenly vault carefully and pointed out to us the brilliant star situated in Orion's shoulder saying that it was towards that star that our course must be set and that within two days we should come to a land with which he was well acquainted and where he had many friends. We gained the impression from his gestures that he had a child born of a lover there.

Despite his assurances that on this island we would find coconuts, bananas, poultry, pigs and women of course. Ladies who from the very graphical gestures he made were of the most accommodating disposition. I had, however, no intention of deviating from my intended course and despite him running to the wheel, the function of which was well aware, and attempted, in spite of the helmsman's resistance, to change our course towards the star he had indicated. We had great difficulty in calming him down; our refusal to comply with his wishes caused him great distress.

At dawn on the following day he climbed to the masthead and spent the entire forenoon gazing in the direction of the land he so desperately desired to revisit. It was as if he believed he could influence events by longing alone. Putting aside his fit of pique later that evening, he related without hesitation and in his own language, the names of a great number of the greater-magnitude stars.

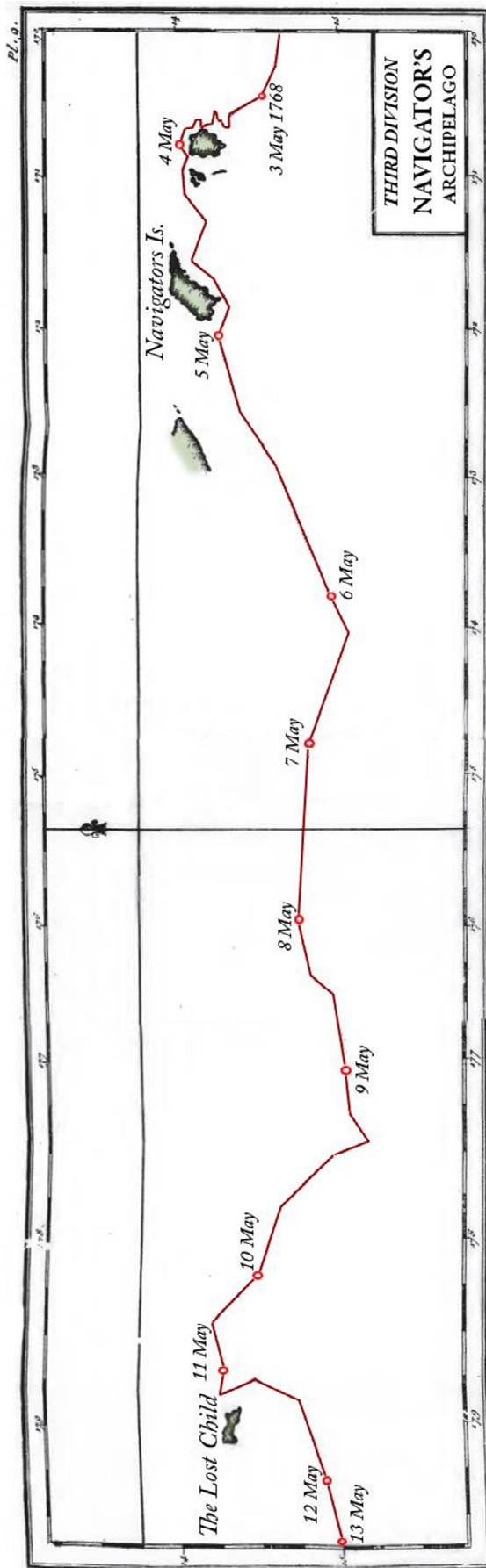
I am quite certain that he was perfectly well aware of the moon's phases and all the various phenomena which at sea serve to indicate changes in the weather. He was very clear in stating that the Tahitians were convinced that both the sun and the moon were inhabited.

During the remainder of the month of April we had good weather with only light winds tending towards the northern quarter more frequently than the southern one. On the night of the 26th and 27th our French-Coast Pilot died suddenly from an attack of apoplexy. These pilots are known as coastal pilots (*Pilotes-côtiers*) and every one of the king's ships has a pilot appointed who is familiar with French coastal waters. (*Pilote-pratique de la côte de France*). These persons are different from the members of the crew who are nominated one of the following grades: Pilot, (*Pilote*) Assistant Pilot (*Aide-Pilote* or *Pilotins*).

Non-seagoing people have very little idea of the functions these various pilots fulfil aboard ship. It is often believed that it is they who direct the course of the ship and that the service they provide is analogous to the white stick carried by a blind man. I am not aware whether or not there are any nations in the world who confide into the hands of these low ranking individuals the sophisticated art of navigation. In our [French] ships the function of the pilot is to oversee the helmsman's diligence and to ensure he unerringly maintains the course that only the captain can specify. Another of his responsibility to record all the corrections that are required due to changes in the wind or that are ordered by the captain. It is his further duty to watch for any signals that might be made. In exercising these duties the pilot is closely supervised by the office of the watch.

Without a doubt all the officers of the King of France's Navy who graduate from the Academies are better versed in geometry than is, in point of fact, absolutely necessary for them to perfectly understand the laws of pilotage; such knowledge being so essential a part of navigation. The pilots we have referred to should in fact be more correctly termed as belonging to a "class of pilots" their other duties include: care of the ship's main and azimuth compass, long lines and sounding lines, lanterns, flags etc. etc. It can be clearly seen that the various functions they fulfil demand no more than disciplined attention to detail.

It is perhaps worth observing that my own pilot, for this particular voyage, was a youth of 20 years; my second pilot was the same age and, for the assistant pilot, this was his very first voyage.



Astronomical observations.

During the course of this month [April] my estimated position had been twice compared with the astronomical observations made by Mr Verron. For the first comparison, which related to observations made while we were still at Tahiti, there was a difference of 13' 10"; my estimated position putting me to the west of the observed position. The second comparison was made against observations taken at midday on the 27th. On this occasion the difference was 01° 13' 37"; putting me to the east of the observed position.

The second group of islands. We name it "The Bourbon Archipelago".

The second group of islands, which we discovered during this month, we have referred to on our charts as, "The Second Division of the islands" and we named this group "The Bourbon Archipelago".

May, 1768.

On 3 May, only moments after the first glimmerings of daylight had lightened the sky, we sighted land to the north-west of us at a distance of 10 or 12 leagues. The wind being at that time in the north-east quarter I set a course to put us to windward of the island's most northerly point which was of considerable elevation. My intention being to position the ship where we would be able undertake a good reconnaissance.

We take a look at the new islands.

We had by this time passed beyond the extent of Aotourou's geographical knowledge. In fact when we sighted this new land he was of the opinion that it was our own homeland. During the course of this day we were frequently beset by severe squalls with periods of calm or light westerly winds, accompanied by showers, in between them. This sort of disturbed weather is typical in these latitudes whenever even the most inconsiderable scrap of land is approached.

Before the setting of the sun we could just make out that this new land comprised 3 islands, one of them being much larger than the two others. During the night we enjoyed good visibility thanks to the brightness of the moonlight and so we kept the island in sight all night long. With the coming of daylight we approached close to the island and coasted along the eastern side of the greater of the islands. We started from its most southerly and went up to the most northerly one. This south to north aspect of the island was its longest coastline and was perhaps 3 leagues in extent. The breadth of the island from west to east is 2 leagues, or thereabouts.

The slopes of this island's coastline, although everywhere very steep, are completely tree-covered right to the very summit and are entirely lacking in valleys and beaches. It is, perhaps most properly described as a towering mountain rising straight out of the ocean upon the flanks of which the waves break furiously and almost without intermission.

We could see two fires burning and some cabins with conical roofs covered in rushes; they had been erected in the shade of a coconut tree grove. Running along at the very edge of the shoreline we could see a group of some thirty men.

The two smaller islands are situated to the West N West of the large one at a distance of about one league. The most distant of the two bears West N West from the nearer island and they are separated, one from the other, by a narrow strip of sea. Close to the extreme westerly point of the most westerly of the two small islands there is an islet. Both these two small islands are no more than half a league across and they are both as steep and as elevated as their larger neighbour.

Trade with the inhabitants.

At noon, having set a course to pass between the large and the two smaller islands, we sighted at a canoe heading in our direction; we hove-to in order to allow it to come up to us. When the craft had approached to within pistol range she stopped. There were five men on board and it was obvious that they felt no inclination to come alongside us. Despite of every sign of friendship we could think of to entice them they could not be persuaded to approach any closer. All of them were completely naked with the exception of their genitalia. They held up and displayed to us coconuts and various root vegetables. The Tahitian man we had aboard stripped off his clothes in order that he might appear more like them and made an attempt to communicate with them using his own language. This was to no avail; they understood nothing of what he said for they did not belong to the same nation.

It was wearisome to us that, despite them being obviously attracted to the small items of trade goods we offered to them, they continued, out of fear I suppose, to stand at a distance from us. We started to lower the smaller of the ship's boats into the water but upon them observing what we were doing they paddled away from the ship as if they were being pursued by the devil himself. I gave orders to the boat that no attempt was to be made to pursue them.

Shortly afterwards several other canoes; some of which were under sail, made their way towards us. The men in them were obviously less timorous than those in the first canoe for they approached close enough to make the exchange of goods practicable. Not one of them however, could be persuaded to come aboard the ship. We obtained from them some yams, coconuts, a sort of waterfowl endowed with the most magnificent plumage and several pieces of very beautiful shell. One of them had a fine rooster that he would not part with for anything we were prepared to give him. They also exchanged some lengths of cloth of the same composition as that we had seen in Tahiti. This material was not of such good quality as that made by the Tahitians and was dyed in unattractive shades of red, brown and black.

They also gave us clumsily fabricated fishhooks made from fishbone, pieces of matting and six foot long spears made of some sort of hardwood. They had no interest in accepting iron in exchange; their liking was rather for small pieces of red coloured cloth which they preferred over nails, knives or earrings; exchange goods which had been so much in demand in Tahiti.

It is my belief that these people were less intelligent than the Tahitians; their physical appearance was generally much more primitive and we found it essential when bartering to keep our wits about us to prevent them cheating us.

Description of these aborigines.

The people who live on these islands are of no more than medium height; they are agile and extremely astute. They paint their chests and thighs, just above the knee, with a deep blue pigment. Their natural skin colour is generally bronze, but, we have seen amongst them some who are much

lighter in colour than the majority. They shave or pluck out the hair on their faces and we saw only one of them who had a beard. All of them have black hair and wear it tied up on top of their heads.

Description of their canoes.

Their canoes are constructed with a great deal of skill and are fitted with outriggers; neither the stern nor the bow is in any way elevated but they are decked in. In the centre of both the fore and the aft deck areas there is a row of wooden projections, the ends of these are formed to resemble the head of a nail and are covered with the blindingly white shell of some species of scallop. The sails of their canoes comprise several sections of triangular matting. The sides of the sail are attached to batons one of which is used to attach the sail to the mast while the second one is attached to the outer bolt-rope and fulfils the function of a boom.

When our sails caught the wind these frail vessels followed the ship for a great distance out onto the open ocean. Some of these craft belonged to the two smaller islands; one of them had an ugly old woman aboard. Aotourou considered any association with these people beneath his dignity and showed nothing but contempt towards them.

When the ship came under the lee of the larger of the islands we lost our wind and because of this I had to give up my intention of passing between the large and the two smaller islands. The channel in this location has a breadth of about one and a half leagues and I considered that there could well be a suitable anchorage there.

At six o'clock that evening we sighted from the masthead yet more land bearing West S West; it had the aspect of three isolated mounds¹⁰⁵. We set our course towards the south-west and two hours after midnight we again saw the same land bearing West 2° South. As it was a bright moonlit night we could still clearly see from our present position the group of islands that we had first come across when they were to the north-east of us.

We continue towards the newly sighted islands.

On the morning of the 5th [May] it became clear to us that this new land was in fact a beautiful island and what we had seen the previous evening was nothing more than the summits of its highlands. It is a mountainous island having between its peaks extensive plains where an abundance of coconut palms and a great number of trees of other species were growing. We cruised along its southern shore at a distance of some 2 leagues but discovered no sign of an anchorage.

Everywhere all along the length of this coastline the sea beats with an unbridled fury. We noted in fact that there was a rocky reef extending westwards for a distance of about 2 leagues from its most westerly point. We took a series of bearings from which were able to accurately establish the true geographical direction in which this section of the coastline lay. A great number of canoes, all under sail and closely resembling those that we had seen at the first islands, came out to us and encircled the two ships, but, they had little inclination to come close to us, only one of them mustered sufficient courage to come alongside the *Etoile*. We gathered from the signs they made towards us that the crews of these canoes wanted us to visit the island; this we were, unfortunately, prevented from doing because of the breakers which were beating violently against the coastline, almost without intermission, making a landing there impossible.

¹⁰⁵ Bougainville uses the word *mondraïns* - that is to say, a small hill resembling a burial mound. -JFF

Our speed through the water at this time was something between 7 and 9 knots, nevertheless, these canoes, propelled at great speed by their sails, experienced no more difficulty in sailing round our ships than they would have done had we been at anchor. We could see from the masthead that there were several other canoes navigating to the south of us.

Since six o'clock this morning we had been able to see yet more land to the west of us. Later in the day it became cloudy and our view of them was obscured, but, by 10 o'clock we caught sight of them once more. The coastline of this island lay in a south-westerly direction and appeared to us to be just as hilly and extensive as were the other islands we had seen and from which this one is separated by a distance of some 12 leagues on a west-east axis.

During the course of that afternoon a heavy mist came down and persisted for the remainder of the night and all of the following day, this effectively preventing us making a detailed examination of this island. All that we were able to make out was that at the island's north-easterly point there were two islands, one of them somewhat bigger than the other.

The geographical position of the islands forming the third section.

The longitude of these islands is almost exactly the same as that which Abel Tasman reckoned himself to be in when time he discovered the islands he called Amsterdam Island, Rotterdam Island, Pilsaars Island, Prince William Island and the Fleemskerk Shoals.¹⁰⁶ It is also the position where the Solomon Islands are considered to lie. Moreover, the canoes that we had previously seen to the south of us suggested there could be others islands in this region. So it seemed to us that all these islands form a chain spread out along the same meridian. These are the islands which we have called The Navigators Archipelago and they are indicated on the chart showing the third section of islands. During the morning of the 11th [May] following our sighting of the Navigator's Archipelago we steered a West $\frac{1}{4}$ S West course and sighted land to the West S West at a distance of 7 or 8 leagues; at first it appeared to be two separate islands. The wind then dropped away to a dead calm we were unable to make an immediate approach.

Having drawn nearer by the 12th we could see that it was a single island with elevated land at its extreme ends joined together by more low-lying land in the centre; the entire island appeared to be curved in an arc thus forming an open bay on its north-eastern side. The major axis of this island extended in a North N Westerly direction. We gave this island the name The Lost Child (*l'Enfant Perdu*).

¹⁰⁶ This statement is rather confusing, the Islands Bougainville is now in the vicinity of, which he calls Navigator's Archipelago, are a part of the Samoa Group. Amsterdam, Rotterdam, Pilsaart Is. etc, are former names for islands in the Tonga group, some 550 Nautical miles to the S-W. The Solomon Islands are over 1500 Nautical miles West of the Samoa Group! - JFF



NAVIGATOR'S ISLAND CANOE
A better idea of Samoan canoes can be found at:
<http://collections.tepapa.govt.nz/Term.aspx?irn=421683#RelatedObjects>

However, to avoid the danger of putting ourselves on a lee-shore, we approached no closer than 7 or 8 leagues.

Metrological observations.

The disagreeable weather, which had started on the 6th of this month, continued almost without interruption until the 20th.[May] During this entire period we suffered calms, rain and westerly winds. Generally speaking, as one approaches land in this ocean that bears the name "The Pacific", so the weather becomes more tempestuous. This phenomenon is most particularly striking when the moon is waning. If at this time the weather becomes squally and enormous, unmoving clouds are seen hanging above the horizon, then that is a pretty sure indication that land is nearby.

It is also a warning to proceed cautiously upon one's course. It is impossible to overstress the care that must be taken and the anxiety one is subjected to when navigating in these uncharted waters. From the least expected quarter the mariner can suddenly come upon land or reefs. These dangers are particularly menacing during the long nights that one experiences in the torrid-zone. It is always most important to proceed with the utmost caution and to alter course when the horizon ahead is obscured.

There are as well the ever pressing problems of water and provisions shortages and the all too frequent frustration felt at being unable to take advantage of favourable winds because poor visibility forces one to proceed at a speed compatible with prudent navigation. Often the only practicable thing to do is to bring to or stand on our boards during the hours of darkness.

We find ourselves in a dangerous situation.

In addition to the above ever present perils, scurvy once again showed its ugly face. A great number of the crew and the majority of the officers were suffering from inflammation of the gums and mouth. The few palatable items of sustenance that remained to us we reserved for those who were sick. Those of us who were healthy had to make do as best we could with dehydrated vegetables and salt meat that was in a state approaching putrescence.

During this same period several cases of venereal disease, that had been contracted in Tahiti, appeared on board. The afflicted displayed exactly the same symptoms as cases that we were familiar with in Europe. Aotourou himself had been smitten and I informed him that it was necessary for him to be examined; this news caused him great consternation, for, from what we could gather, the disease is but lightly regarded in Tahiti. Despite his initial reservations and reluctance, Aotourou finally allowed the surgeon to administer a course of treatment.

It was Christopher Columbus who, aboard his ships, first carried this disease into the Americas and here it is now, firmly established in an island situated in the middle of the greatest ocean on the planet. Could it be that one of the English ships that called in at Tahiti was responsible for bringing it here? Or would the doctor, who laid the wager: "if you were to shut up one healthy woman with four strong healthy men, the inevitable outcome of their intercourse would be venereal disease", win his bet?

We sight new land.

At dawn on the 22nd, [May] while we were steering in a westerly direction, we sighted ahead of us an extensive and elevated country. When the sun rose we could see that it comprised two islands; the

most westerly of the two lay between South $\frac{1}{4}$ S East and South W $\frac{1}{4}$ South. This land appeared to extend towards North N West (corrected compass) in this direction and was about 12 leagues long. We gave this island the name Whitsuntide Island (*île de la Pentecôte*)¹⁰⁷; that being the day upon which we discovered it. The second of the two islands bore South W 5° South to West N West and we named it Aurora Island (*l'île Aurore*)¹⁰⁸; that being the time we first caught sight of it. Our initial intention was to approach the two islands as closely as possible and to pass between them on the port tack. Unfortunately, the wind dropped away and we were compelled to pass on the leeward side of Aurora Island.

While we were coasting its western shoreline in a northerly direction we sighted a small island having the form of a sugarloaf bearing North $\frac{1}{4}$ N West; we gave the name Etoile Peak (*pic de l'Etoile*). We continue to cruise along the coastline of Aurora Island at a distance of $1\frac{1}{2}$ leagues. For about half of its entire length, of about 10 leagues, this island lies on a true north-south axis. Further on it veers off toward the North N West. Aurora Island is not very broad, being only about 2 leagues at its widest point. The slopes of this island are very steep and completely tree covered.

At two o'clock in the afternoon we sighted, on the other side of this island, the summits of high mountains at a distance of some 10 leagues beyond. They appeared to be part of a piece of land that we had observed at half past three that same afternoon over and beyond the extreme northerly point of Aurora Island; which, at that time bore South S West by compass.

After having doubled Aurora Island we set a South S Westerly course on which we continued until sunset when we sighted yet another high and quite extensive island extending from the South S West to as far as North W $\frac{1}{4}$ North, at a distance of some 16 leagues.

During the night we made several boards with the intention of positioning ourselves further to the south-east so that we would be able to determine whether the land to the South S East of us formed a part of Whitsuntide Island or, whether it was separated from it. On the 23rd we were able to confirm this land did form a third member of the group. Whitsuntide Island and Aurora Island both lie on approximately the same meridian and about 2 leagues apart; the new, third island, lies to the south-west of Aurora Island and is, at its closest point, 3 or 4 leagues distant from it. The north-western coastline of the third island is at least 12 leagues in length and comprises of high, steeply sloping countryside completely covered with trees.

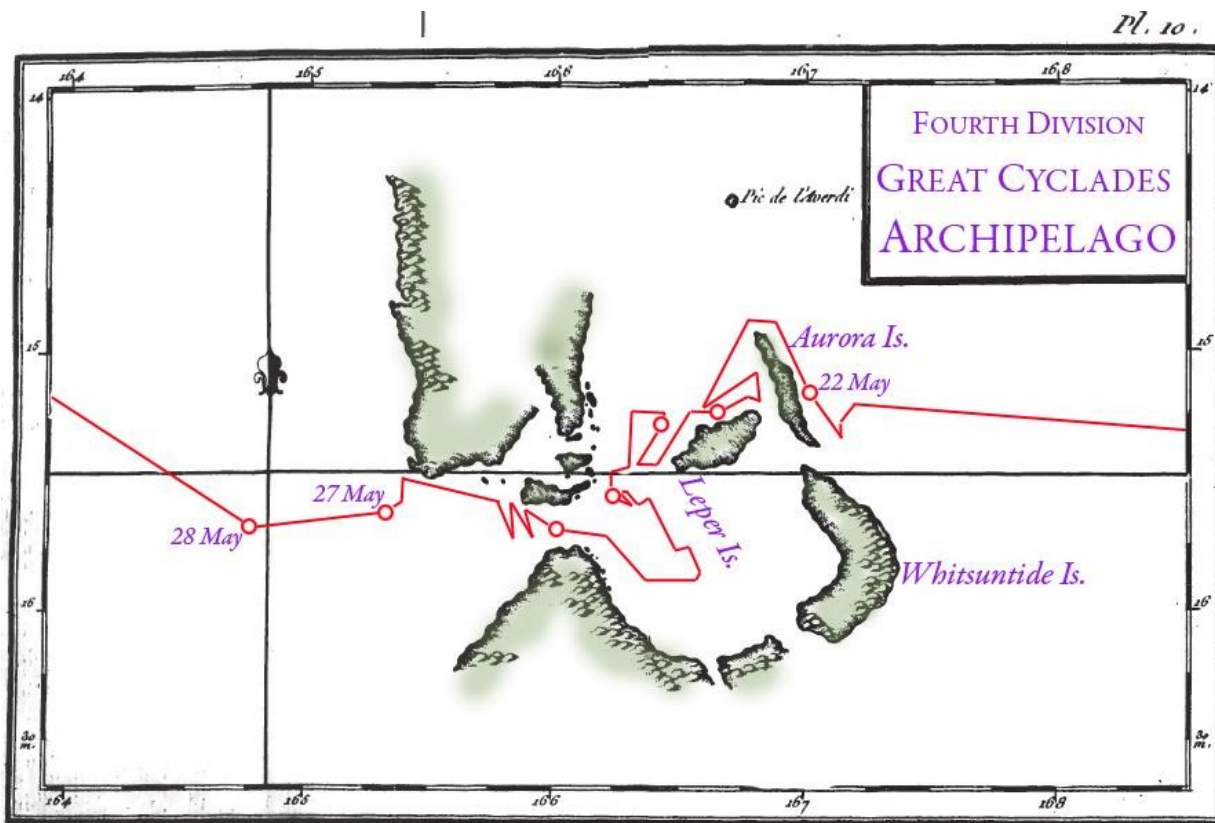
During the 23rd we coasted along a part of this shoreline and saw several canoes, but, they kept close inshore and made no attempt to approach us. We could see no sign of habitations; nevertheless, from the woodlands on the coastal strip and even from the summits of the mountains many columns of smoke rose up into the sky. Even after we had approached very close to the shore we found no bottom when sounding with a line of 50 fathoms.

We make a landing on one of the islands.

At nine o'clock that morning [23 May 1768] we sighted a section of the coastline that appeared to be suitable for a landing. I decided to send a party of men ashore here in order to cut firewood of which we were in desperate need. The boat's crews were further instructed to make a reconnaissance of the island and to attempt to gather fresh foodstuffs preferably of a sort that would ameliorate the condition of our sick people.

¹⁰⁷ Now called Pentecost Island, part of the Vanuatu Group.-JFF

¹⁰⁸ Now called Maewo Island, part of the Vanuatu Group.-JFF



In all we dispatched three armed boats under the orders of Sub-Lieutenant, Chevalier de Kerué, an ensign. During the time the boats were on shore it was our intention to cruise back and forth in their close proximity in order to support them with our artillery should it become necessary. We saw them make their landing completely unopposed and, as a consequence, at one o'clock that same afternoon I embarked in the yawl in order to join them. On reaching the shore I found the boats crews engaged in cutting timber; in the work of transporting it to the boats they were being aided by the local islanders. The officer who had command of the landing party told me that, when they arrived, a large group of the islanders had come down to the beach carrying bows and arrows. By signs they made him aware that they were prohibited from setting foot on the island. However, and despite their menaces, he had ordered the boats crews to continue with the landing.

Upon coming ashore the islanders retreated and continued to draw back as our men proceeded inland. They continuously held their weapons in an attitude ready to fire upon us if we were to approach too close to them. The Prince of Nassau ordered the landing party to hold their ground while he alone walked towards the aborigines. They, on seeing that it was now but a single man coming towards them, ceased their withdrawal. The prince displayed to them and offered small pieces of red cloth, eventually the distribution of these was accepted by them. It was by these means that a degree of confidence and understanding was established between them and us.

The Chevalier de Kerué immediately ordered his working party into the wood to cut timber under the protection of several armed sentinels; a second group were employed gathering fruit.

Then a strange thing happened; the locals, who had formerly been very belligerent, approached our people in a most friendly fashion and gave them fruit, for which they would not accept our offer of

payment in nails or pieces of iron. We tried to trade with them for some of their bows and clubs but they were adamant in their refusal to part with them and, consequently, we had to be satisfied with the acquisition of a few arrows.

During the entire time we spent upon the island a great number of them swarmed around our people; never for one moment did any of them lay their weapons aside; even those of them not carrying bows and arrows had stones which they appeared ready to throw at the least provocation. They made it known to us that a state of war existed between them and the members of another tribe who lived not very far away. In fact, we observed a group of armed men approaching in good order from the western side of the island. The natives in close company with us immediately took up defensive positions to repel them. However, the attack, that had appeared imminent, did not materialise. This then was the situation that we found upon landing on this island; we remained there only long enough for me to bury an Act of Possession, engraved on a plank of oak, in the shade of a tree and to gather sufficient timber and fruit for our requirements. This being achieved, we re-embarked as quickly as we could.

They make an attack upon us.

Our unexpected departure obviously balked their intention to attack us for which, perhaps, they had not had sufficient time to make proper preparation. That at least is the best explanation I can propose for the action they subsequently took. As we pulled away from the shore they came down to the water's edge and launched a shower of arrows and stones in our direction. We fired several musket shots over their heads but this did not seem to deter them. Indeed, several of them waded into the water in order to fire at us from a closer distance. We fired a volley directly at them, felling several of them, this action immediately put an end to the attack and they fled back into the woods squealing in pain and fear. One of our sailors was slightly wounded when he was struck by a stone they threw at us.

Description of these islanders.

The inhabitants of these islands are of two races; one of them is Negroid in appearance whilst the other group is a sort of mulatto. They have thick lips, their hair is tightly curled and a few of them dye it a yellowish colour. They are short of stature and not at all physically robust; a great many of them being afflicted with leprosy. For this reason we named the place Lepers Island¹⁰⁹.

While we with there we saw only very few women and none of these were any less disgusting in appearance than were the men. Save for a sort of mat, with which they cover their genitalia, they go about completely naked. Their women carry their children on their backs suspended in a sort of scarf which is often decorated with a beautiful design executed in some sort of crimson dye.

We noticed that none of the men wore beards and that they pierce their nostrils for the purpose of suspending various ornaments. On their arms they wear either a sort of bracelet made from the tusk of the Babirusa¹¹⁰, or, a heavy ring fashioned from some other material resembling ivory. Round their necks they wear a collar made from the carapace of a turtle; an animal that, they assured me, was very common in the waters hereabouts.

¹⁰⁹ Now called Oba Island, part of the Vanuatu Group.-JFF

¹¹⁰ A member of the pig family. -JFF

The weapons they carry.

The weapons that they use are the bow and arrow, clubs made from iron wood and stones which they launch without using a sling. Their arrows are made from reed tipped with a long sharply-pointed bone. Some of the arrowheads are square in section and provided with barbs made from fish-bones, these are inclined in such a fashion as to make the projectile difficult to withdraw from a wound. Additionally, they have sabres which are also made from iron-wood. None of their canoes ever approached very close to us, but, seen from a distance, they appeared to us to be constructed in the same manner as the canoes we had seen at Navigator's Island and to have the same sort of sails.

Description of the place where we made our landing.

The beach upon which our landing party had come ashore was very small. Twenty paces inland from the water's edge the land began to slope steeply upward towards the mountains and was everywhere covered in trees. The soil here is very light and not very deep, consequently, although the fruits here are of the same species as those which grew in Tahiti (with the addition of a particular type of fig we found growing there); neither their quality nor the quantity available, however, was as good.

In the woodlands there were many footpaths and we came upon clearings surrounded by three foot high palisades. Whether these were defensive works or simply markers indicating the limit of possessions we could not be certain. We came across no habitations except several huts that were so small that the only way to enter them was by crawling in on one's belly. However, around us there were a great number of people, all of whom appeared to be of a miserable disposition. Perhaps this was because of they constantly engage in internecine war; of which we had just witnessed an example.

Inter-tribal war in these parts is a cruel and constant scourge. Upon several occasions we heard the menacing sound of some sort of a drum coming from the depths of the woodland on the summit of the mountain. Without a doubt it was some sort of a call to arms, because, the moment we had dispersed them by gunfire they immediately rallied to renew their attack. The threatening sound of this drumming increased in tempo and volume every time the group of enemy warriors, whom we saw on several occasions, appeared to be about to enter into their territory. The Tahitian who had accompanied the landing party ashore appeared to consider this race of men particularly odious and was unable to understand a single word of their language.

We resume our route amongst the islands.

As soon as we got back to the ship we hoisted our boats inboard and set sail south-west towards a long coastline which was clearly visible extending from south-west to West N West. During that night we experienced a prolonged calm; what little wind there was being very variable, hence what ground we made was largely due to the current which carried us towards the north-east. These same airless conditions persisted during the entirety of the 24th and the night following. It was only with considerable difficulty that we managed to keep ourselves 3 leagues clear of Leper Island.

At five o'clock in the morning on the 25th [May], a very pleasant breeze sprang up from the East S East. Unfortunately, the Etoile, who was still in the lee of the land, received no benefit at all from this wind and remained becalmed. Nevertheless, under a good press of sail we set our course towards the land to the west of us in in order to make a reconnaissance. By eight o'clock that morning we had established that there was land on the horizon at all points of the compass and we appeared to be

enclosed within a great gulf. It was apparent that Pentecost Island extended southwards in the direction of the land that we had recently discovered. We were uncertain whether or not it formed part of the same land mass and, as appeared to be the case now, we were within a large bay; or, whether there was water between them. In several places along the coastline there were features that appeared might be either openings into passages or large inlets. One of these in particular to the west of us appeared to be an opening of considerable size. We could see several canoes which appeared to be making their way between one of these land-masses and the other. By 10 o'clock we were forced to turn in the direction of Lepers Island. The Etoile, which we could no longer see even from the top of the masts, was still becalmed. In spite of this, where we now were being clear of the land, a good East S East breeze was blowing. By the time the Etoile was starting to feel the effects of the wind it had become too late to carry out a reconnaissance and, consequently, the entire day of the 25th had been wasted.

We spent the following night cruising back and forth on the open ocean. On the morning of the 26th, at break of day, we took compass bearings and these indicated the current had carried us several miles further to the southward than we had estimated. Pentecost Island still gave the appearance of being separated from the land to the south-west, but, that the stretch of water between the two of them was very narrow.

Along the length of this coastline we discovered several other openings, but, we were unable to determine how many of them separated the land into different islands or, in fact, the number of islands there were in this archipelago.

Aspect of the terrain.

We could see that the land extended from the East S East and passed through south as far as the West N West (by compass) but we could not determine exactly where it ended. I set a new course to the North W $\frac{1}{4}$ West, gradually going round to the west, in order to pass along a beautiful tree-covered coastline alternatively interspersed with extensive stretches of cultivated ground and areas where trees had been expunged by some trick of nature.

At a glance it appeared to be an extremely fertile country. Some of the upper parts of the more elevated land were also devoid of trees. The occasional absence of trees and the reddish colour of the ground suggested to me that minerals might be present here. The course that we were on ultimately brought us to the great opening we had observed on the previous evening lying to the west of us. At noon, while we were engaged in making an observation of the sun's elevation, we reached the centre of the opening and found it to be between 5 and 6 leagues broad and running East $\frac{1}{4}$ S East and West $\frac{1}{4}$ N West. Some men appeared on the southern shore and others approached our ships in canoes; but, as soon as they were within musket-shot they held their distance and refused to approach any closer despite our encouraging them to do so. We could now see that the men in the canoes were Negroid in appearance.

We cruised along the northern coast at a distance of some three quarters of a league; the country in this location is not very elevated and is covered with trees. A great crowd of these Negroes had, by this time, appeared on one of the banks; some of them launched their canoes and came out towards us. These men, however, showed no more inclination to approach close to us than did those who had come out from the opposite side.

We continued our way along the passage and after having covered a distance of between 2 and 3 leagues we came across what appeared to be a beautiful open bay with two large islets within its

opening. I straightway dispatched one of the ship's boats with an armed party to make a reconnaissance. While they were away from the ship I stood off from the shore at a distance of between 1 and 2 leagues. We made frequent soundings but even with a line of 200 fathoms, no bottom was found.

We attempt to find an Anchorage.

At about five o'clock we heard a salvo of musket-fire which caused us a great deal of concern. It turned out to have come from one of our ships boats which, in spite of my orders, had become separated from the other party and had got themselves into the unenviable position of getting too close to the shore where they had come under attack by the islanders. The tribesmen fired two arrows at them which they took to be sufficient pretext for their first volley. Continuing their way along the coast they kept up a brisk rate of fire with muskets and blunderbusses both towards the natives on shore and the canoes, they having approached close enough to fire several arrows in their direction. From our present position I was unable to see the cutter because of a headland projecting from the coastline. I made the assumption, based on the level of gunfire that could be heard, that they were under attack from a whole fleet of canoes. I had started making preparations to dispatch our launch in their support when our cutter appeared all alone from behind the headland that had previously concealed it. At the same time I could hear pitiful cries and drumbeats being made by the Negroes who had retreated into the woodlands. I immediately made a signal for our boat to repair immediately on board. I later issued orders that would prevent any future repetition of this dishonourable abuse of our superior firepower.

Why we are prevented from anchoring.

The ships boats from Boudeuse had established that this coastline, which until now we had believed continuous, was in fact a chain of small islands; each following on closely after the preceding one. What to us had appeared to be a bay was in fact only the opening of the channel between two islands. The boats had taken soundings and had obtained depths of 40, 30 and 20 fathoms on a sandy bottom. However, the depth varied considerably over very short distances, ruling it out as a safe anchorage. This was particularly so in our present situation; we no longer having enough anchors that we dare risk putting one down when the risk of losing it was anything more than minimal. Had we moored it would have been necessary to do so a good half a league away from the shore; at any closer distance the bottom being of a rocky nature. At such a distance from the shore our working parties would not be under the protection of the ship's artillery. To make matters worse the countryside here is everywhere covered with dense undergrowth making it essential to deploy heavily armed guards for the protection of the landing parties against surprise attacks.

We did not delude ourselves that the hostility we had, so rashly, exhibited would be easily forgotten by the people here. We were forced to come to the conclusion that any continuation of trade or of obtaining a further supply of foodstuffs was out of the question.

We had observed that the comestibles produced here were exactly the same as those we had found at Leper Island. The people were also of the same type; they were black; their bodies were completely naked except for their genitalia; they wore the same ornamental bracelets and collars and the weapons they carried were identical.

A new attempt at making a landing.

We passed the night cruising offshore and on the following morning, the 27th, we approached the coastline and then sailed parallel to it for a distance of about a league. Just before ten o'clock we made out a plantation of trees laid out in parallel lines, as in a garden, on a low-lying piece of ground. The earth beneath these trees appeared to have been trampled by the passage of feet and was of a sandy nature.

In the vicinity of this cultivated area we could see a great number of people. There appeared to be an inlet beyond the point so, in anticipation, we prepared the ships boats for launching. We were to be disappointed, however, for what had appeared to be an inlet turned out to be no more than a sort of elbow in the shoreline. We continued on until we were abreast the north-westerly point of the island but had still failed to find a satisfactory anchorage. Beyond this point the shoreline continued in a North N Westerly direction for as far as the eye could see. The terrain was of an extraordinarily elevated nature; projecting through and above the clouds we could see an extensive and continuous chain of mountains. The prevailing weather was overcast, from time to time there were squalls and showers of rain.

Several times during the day we occasionally glimpsed the land in front of us; but, unfortunately, between these very brief periods of clear visibility the entire countryside lay hidden from us under a blanket of mist that had descended around us. We spent the entire night, which was extremely stormy, standing off the shore and making short boards. We discovered, however, that the prevailing current had again carried very much further to the south than we had estimated. For the whole of the day of the 28th, right up until sunset, we had clear views of this mountainous landscape which bore between east and North N East from us at a distance of 20 or 25 leagues.

On the morning of the 29th [May] we steered a West N Westerly course and soon came upon yet more lands. I named these newly discovered lands the Great Cyclades Archipelago¹¹¹.

Our thoughts concerning these newly discovered lands.

It was our opinion that these islands, judging from those that we had observed closely and others that we had only seen in the far distance, were spread over an extent of ocean encompassing 3° of latitude and 5° of longitude. It is further my opinion that the extreme northerly extent of this group is what Roggwin had seen to the south of the 11th parallel and had named *Thienhoven* and *Groningue*.

We, however, having made our landfall here were convinced that this was the Southern Land of the Holy Spirit (*la terre Austrel du Saint-Eprit*); its appearance seemed to comply with what de Quiros had described.

With every day that passed, with every new observation we made we became more and more enthusiastic and determined to continue our reconnaissance of this locality. It is perhaps beyond a coincidence that at precisely in this same latitude and longitude, in a coastline that appeared to be part of a great continent, de Quiros had recorded a great bay which he called *Baie de Saint-Jaques & Saint-Philippe*.

We had found a passage the breadth of which corresponded exactly with the width that de Quiros had given for the opening of the bay he had described. Had this Spanish navigator made a mistake in

¹¹¹ Now called the Vanuatu Group.-JFF

his observations or had he for reasons best known to him wished to conceal the true nature of his discovery?

Had the geographers and mapmakers been merely guessing, perhaps, when they showed this land, referred to as *le Saint-Eprit*, as being part of the same land-mass as New Guinea? In order to resolve this vexing question it will be necessary to follow once more along this same parallel for a distance of more than 350 leagues. That is exactly what I made up my mind to accomplish. However, now being in desperate need of fresh provisions a port of call, at some European owned establishment, could no longer be postponed. As a result of reaching this conclusion, I shall now relate how our own perseverance and determination were to cause us becoming victims of misfortune.

Differences between our estimated and observed positions.

Mr Verron had made several observations during the month of May and the results he obtained determined our longitude on the 5th, 9th, 13th and on the 22nd. The result of these astronomical observations coincided closely with my own estimated position; the small discrepancies that did exist were in every case on the same side. On the 5th, I was placed more Easterly than the observed position by $4^{\circ} 00' 42''$; on the 9th, by $4^{\circ} 23' 4''$; on the 13th, by $3^{\circ} 38' 15''$ and, finally, on the 22nd, by $3^{\circ} 35'$ ¹¹². All these differences, as can clearly be seen, indicated that since we had left the island of Tahiti the currents had carried us further to the west than we had calculated. These currents explain the reason why navigators, having made a crossing of the Pacific Ocean, make a landfall at New Guinea far earlier than expected. It is for the same reason that the east-west extent of this ocean was formerly considered less than it is in reality the case. I ought also to draw attention to the fact that, during the season when the sun is in the southern hemisphere, our estimated positions have been to the west of what has been determined by observation. However, when the sun has passed into the other hemisphere, the side on which these differences occur changes also. The thermometer during this month has generally shown a temperature between 19° and 20° ; on two occasions it dropped to 18° and on one occasion to 15° .

During the time we were amongst the Great Cyclades I had occasion to go aboard the *Etoile* where I was witness to a very singular circumstance. For some considerable time a rumour had been circulating aboard the *Etoile* and the *Boudeuse* that the servant of Mr de Commerçon, whose name was Baré, was in fact a woman. His slender form, his beardless chin, the sound of his voice, his scrupulous avoidance of ever changing his underwear, except when he was completely alone; and, never using the ships heads in the presence of any other person. These and several other indications had given rise to and served to support everyone's suspicions.

However, and set against these suspicions, it was difficult to conceive Baré, the botanist, was anything other than strong and resolute male. Was it not he who had followed his master during all the excursions made to collect botanical specimens in all the snow and hail amongst glacial mountains of the Magellan Strait? He had marched over the most difficult terrain carrying packages of food, arms and botanical sample boxes and with such inexhaustible courage that he had been given the nickname "Baré the Beast of Burden!"

¹¹² Either the text is in error here, or, Bougainville's idea of a "small discrepancy" is at odds with what would have been considered, even at this period, an acceptable difference. The figures given suggest a difference between the observed and estimated position of the order 130 nautical miles.-JFF

As things turned out it had been a situation that occurred in Tahiti that had changed suspicion into certainty. Mr de Commerçon had gone ashore there for the purpose of collecting botanical specimens. No sooner had Baré set foot on the shore, his arms, as usual, full of sample boxes, than he had been immediately surrounded by a crowd of Tahitians crying out “it’s a woman” and wishing to bestow upon her the position of honoured guest in the island.

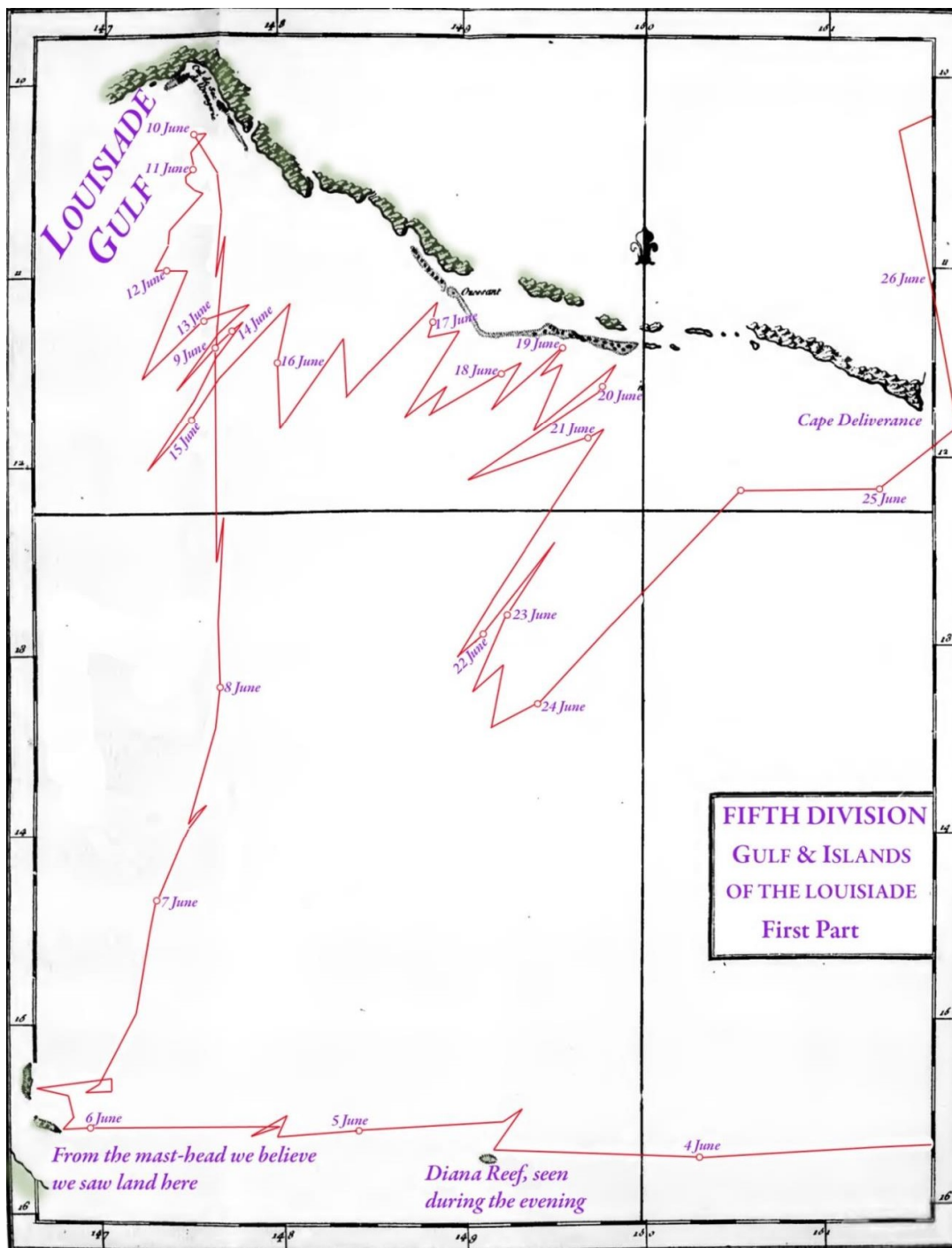
The Chevalier de Bournand, at the time superintending the guard on shore, was compelled to come to her assistance and immediately he escorted her back to the boat. Now, as one might say, the cat was well and truly out of the bag, her life on board became almost intolerable. She became, as well might be expected, the butt of a constant stream of ribald insinuations from the crew.

When I came aboard the *Etoile*, Baré, her eyes flooded with tears, admitted to me immediately that she was in fact a girl. She told me that she had deceived her master as he was boarding the ship at Rochefort by presenting herself to him dressed as a man. She told me that, prior to this she had served as a “foot-man” to a Genoese gentleman in Paris. She said she had been born in the Bourgogne and had become an orphan. Subsequently, failure in some lawsuit or other had reduced her to the miserable state of penury. Her chosen solution to her predicament was to dress as a man in order to gain employment. It had come to her attention that the *Boudeuse* was to make a circumnavigation of the world and this had appealed to her spirit of adventure.

So it was that in this astonishing manner she became the first woman to sail around the world. I am beholden to say, in deference to her good character, that she acted on board with great dignity always displaying wisdom and impeccable decency.¹¹³

She was either 26 or 27 years of age, neither beautiful nor ugly. One has only to imagine wryly the situation that would have arisen if our ships had become shipwrecked and she and some of the crew had been cast upon some desert island or other. How suddenly and unexpectedly interesting her life would then have become!

¹¹³ See Appendix 5 for further information concerning Jeanne Barret.-JFF



CHAPTER V.

*Navigation from the time that we left the Great Cyclades; discovery of
The Gulf of Louisiade; The state of great distress to which we are reduced;
The discovery of new islands; we put in at New Britain.*

Our route after we leave the Cyclades.

The 29th May was the last day we had land in sight and, with fresh winds from the east and South-east, I set our course towards the west. The slow pace of the Etoile reduced our progress considerably. We took a sounding every 24 hours but, even with a line of 240 fathoms, we found no bottom.

June 1768.

During the daylight hours we deployed as much canvas as the ship would carry; but, at night-time we progressed cautiously under reefed topsails; when our visibility was obscured, we hauled up to the wind.

We encounter breakers.

On the night of the 4th and 5th of June, it being a bright moonlit night, we shook the reefs out of our topsails. While we were thus proceeding on our course at 11 o'clock that evening we saw breakers and a low sandy shoreline to the south of us at a distance of half a league. We changed tack immediately and at the same time signalled the Etoile to warn her of the danger. Following this precautionary manoeuvre we continued on our new heading until five o'clock in the morning after which time we resumed our West S Westerly course with the intention of again coming within sight of land, and, at eight o'clock that morning we could see it at a distance of 1½ leagues. It was a small sandy island, hardly raising itself above the surface of the sea, and, for this reason alone, it represents such a serious danger to navigation. This is particularly the case for ships under way at night time or other times when visibility is reduced by fog or mist. So low-lying was this island that at a distance of 2 leagues with a perfectly clear horizon it could not be seen except from our mast-tops. Because this speck of land was so covered with birds I gave it the name Diana's Reef (*Bâture de Diane*)¹¹⁴. During the course of the 5th, at four o'clock in the afternoon, we saw what we thought were breakers to the west of us. However, in this we were in error for we continued our course until ten o'clock that evening, then, during the hours of darkness we either hove-to or progressed cautiously by making short boards during which time we saw nothing to give us concern.

Indication that land is nearby.

The following morning, at the crack of dawn, we shook out more canvas and continued our route under a good press of sail. Over the past 24 hours we had passed through some floating debris comprising small pieces of wood and items of fruit; it's species we were able to identify. The sea by

¹¹⁴ A group comprising – Bampton. Renard, Avon & Anchorage Islands some 500 nautical miles east of Queensland, Australia, -JFF

this time had gone down to a flat calm and this despite the stiff south-easterly wind that was blowing. Under such breezy conditions the fact that the sea was not agitated caused me to consider that there must be land not far off to the south-east of us.

In this part of the ocean we saw several of a type of flying fish we had never seen before. They were somewhat larger than other flying fish; their bodies were black and they had red wing-like fins, of which there appeared to be four, instead of the usual two.

On the 6th [June] at half past one in the afternoon we caught sight of a reef dead ahead of us at a distance of three quarters of a league; it was an unmistakable indication that our westward run had now come to an end. This reef was at least one and a half leagues in extent stretching from West $\frac{1}{4}$ S West to West N West; in fact, some of the crew believed they could see low-lying land to the south-west of the breakers. I made a course alteration to the north and continued in that direction until 4 o'clock, then, I once more turned our bows towards the west. We held this course only for a very short time because, at half past five the lookouts at the masthead reported more breakers to the north-west and to the North W $\frac{1}{4}$ West at a distance from us of something less than one and a half leagues.

We continued on towards them in order to observe them more clearly. We could see that they extended from North N East to South S West and had an extent in excess of 2 miles. Their exact extent we could not determine for we could not see the end of them. It might well have been that they were connected with those that we had seen some three hours earlier. The sea was breaking very violently over these reefs and here and there we could see outcrops of rock projecting above sea level. This most recent encounter with such dangerous features was for us a warning from God to which we were duly submissive.

Prudence became our watchword; to have continued our course through these hazardous waters during the hours of darkness would have been foolhardy in the extreme. Consequently, we passed that night making short boards within those waters with which we had become familiar during the preceding day.

Enforced alteration of course.

With the coming of the morning of the 7th I set course to the North East $\frac{1}{4}$ North and so, regretfully, I was compelled to abandon my preferred objective which had been to continue westwards until we were to the south of the 15° parallel.

We were surely correct in our belief that the southern part of the land of the Holy Spirit (*Saint-Esprit*)¹¹⁵ was none other than part of the Archipelago of The Great Cyclades, which Quiros had taken to be part of a continent, and had been described by him in the most romantic of terms. The reason I continued to adhere to our course along the 15° parallel was that I wanted, by having sight of the eastern coast of new Holland¹¹⁶, to have this conjecture confirmed by solid evidence. Furthermore, taking into account the astronomical observations we had made, all of which had been completely in accord for a period of more than one month (and thus could be considered accurate beyond all reasonable doubt). We had already, by noon on the 6th, reached 146° east longitude; that is to say, 1° further towards the west than the Land of the Holy Spirit (*Saint-Esprit*) was stated to be by Mr Bellin. However, the regular and consecutive sightings of breakers we had made during the past 3 days; the floating tree trunks, the fruits, the seaweed, the direction of the currents and, above all else, the

¹¹⁵ One of the Vanuatu Group.-JFF

¹¹⁶ Australia.-JFF

tranquillity of the sea surface itself; all, when taken together, conspired to convince us that we were approaching a considerable land mass and that, indeed, it was not so very far off to the south-east of our present position.

Geographical reflections.

This land, the presence of which was now being so clearly indicated for us, was in fact the eastern coast of New Holland. Indeed, the numerous and extensive reefs that we had witnessed, extending into the open ocean, all pointed to the presence of nearby low-lying land.

The words of Dampier came to my mind; I recalled that he had been in this exact same latitude of 15° 35' and that he had been eternally thankful to depart from it as at this place he had not even been able to replenish his water. It was my firm belief that the eastern side would be just as inhospitable.

I had formed the opinion, as had he, that this land is nothing more than a great chain of islands the approaches to which abound, in every direction, with the most dangerous shoal-waters liberally studded with reefs.

Having reached this conclusion I was certain that it would be utterly foolhardy to approach this coast more closely; particularly as little or no advantage was to be gained by so doing and, seeing that if we persisted, we would subject ourselves to the additional complication of having to haul clear in the face of the prevailing wind.

By this date there remained only sufficient bread for 2 months and vegetables for no more than 40 days. Though we were well supplied with salted meat it was by now, unfortunately, in very poor condition. It was so rancid; in fact, that our preference was to eat rats, when we were fortunate enough to catch them.

Our situation thus compelled us to direct our course more to the northward even though this would cause us to be placed somewhat further to the east of the route we would have preferred to take.

Unfortunately, the winds, which up until this time had been from the south-west, now deserted us. When the wind finally did begin to blow again it was the cause of us finding ourselves in the most unenviable position imaginable; potentially far more dangerous than any we had hitherto experienced.

Up until the 7th of the month the route we had made good proved to be no better than North ¼ N East. Then, on the 10th at daybreak, we sighted land stretching from due east to north-west.

New lands are discovered.¹¹⁷

Four hours prior to the rising of the sun we could smell, drifting across the ocean, a delicious scent which clearly announced the proximity of land. We later learned this land formed a great gulf opening to the south-east. Upon our first sighting this land we remarked that it appeared to be an extremely beautiful low lying country broken up into open plains. There were woodlands extending right down to a shoreline. The terrain rose gently back toward a hinterland forming an amphitheatre reaching back to foothills with mountains beyond. The summits of these mountains were lost to our sight amongst the clouds. There were three distinct ranges the most elevated chain of which was at a distance of some 20 leagues into the interior. We greatly regretted that, due to the dismal state to which we had been reduced by our lack of provisions, we were prohibited from taking the time

¹¹⁷ Louisiade Archipelago (to the South-East of Papua New Guinea).- JFF

necessary to visit this beautiful island. From what we could see, it was very fertile and abundantly productive place.

Another limitation, we were regrettably forced to accept, was not being able to continue on our westerly course. It had been our hope that, by going in this direction, we would find a passage leading to the south of New Guinea. Had we been in a position to pursue this objective, and, had we been successful in it, a new and shorter route to the Moluccas via the Gulf of Carpentaria would have opened up.

It has to be admitted that nothing was more frustrating to us than not being able to confirm the existence of such a passage. Sightings of land in this region have been reported by some navigators extending as far as West $\frac{1}{4}$ S West. Whatever the true situation might be, it became absolutely essential for us to find a means of getting out of this gulf, for we had unexpectedly penetrated into it much more deeply than we had originally intended. Necessity would oblige us to make an attempt by any route that appeared open to us. So it was that, under these unfortunate circumstances, our patience was tested to the extreme while we were compelled to wait for the arrival of south-easterly winds.

Critical situation in which we find ourselves.

For the entire day of the 10th we were becalmed and at the mercy of a heavy swell from the south-east which pushed us towards the land. By four o'clock in the afternoon we were at no greater distance from a small low-lying island than three quarters of a league. From the eastern extremity of this island there was a reef extending for some 2 or 3 leagues further toward the east. By five o'clock that evening we had managed to set our head towards the offing and it was under these, somewhat alarming conditions, that we passed the night. We attempted, by means of the most fleeting breezes, to claw our way further from the shore. By the afternoon of the 11th we had succeeded in distancing ourselves from the land by about 4 leagues; we had observed that, at a distance of only 2 leagues from the shore, our soundings found no bottom.

As we coasted along this shoreline we saw several canoes under sail and we noted that fires were kept constantly burning there. During this difficult time there was but one moment of light relief; we caught a shark in the stomach of which we discovered the remains of a turtle, thus proving this animal was indigenous to these waters.

At sunset on the 11th we sighted land; its most easterly extent bore between east to East $\frac{1}{4}$ N East 2° East and the most westerly part West to West N West, (by compass): the distance of both the easterly and the westerly extremities being some 15 leagues distant.

During the days that followed we experienced atrocious weather; everything was against us: the wind, always fresh, blew constantly from the East S East or the south-east. It rained constantly and a mist descended upon us that was so thick that we were only with difficulty, by firing our cannon at regular intervals, able to maintain station with the *Etoile*. Keeping together was important to us; she was carrying our supply of food. To top it all, a heavy sea constantly pushed us towards the shore. Thus, whilst carrying only the minimum amount of canvas, we were obliged to wear frequently and so it was with the greatest of difficulty that we managed to maintain water between ourselves and the shore.

It was under these galling circumstances that we groped our way laboriously across this hostile sea, liberally scattered with dangerous reefs as it is. Frequently we had no alternative but, to just shut our eyes to certain indications of danger and simply hope for the best.

During the night of the 11th and 12th, seven or eight specimens of fish referred to as *cornets*¹¹⁸ and known to be a bottom dwelling species, were found thrown up on to the companion-ways. In addition to this we found the forecastle head completely covered with sand and kelp that had been deposited there by the force of the waves.

We are subjected to multiple dangers.

I could see no point in taking soundings as, no matter whatever their result was, no effective action was possible that would diminish the danger we were in. Exactly the same limitations applied to each of the few courses of action remaining open to us. Our ultimate salvation was due to one single circumstance. On the morning of the 10th, which is to say immediately before we were beset by tempestuous seas and poor visibility, we were able to determine our position relative to the land with certainty. Our good fortune was due to the fact that the wind was blowing from the East S East to south-east; had I been aware that we had land to the East S East of us I would have prudently chosen to steer a north-westerly course in recognition of the limited visibility. Had I done so there is every reason to suppose we would have foundered on this unforgiving coastline.

By the 16th [June] the weather had taken a turn for the better except for the fact that the wind remained stubbornly against us. This manageable problem, however, drew little complaint from us; we were only too well aware how good had been our fortune, we having come unscathed through all the trials and alarms of the previous several days.

At six o'clock in the morning we sighted land from north to North East ¼ East, by compass, and so, in order to double it we came about. At dawn on the morning of the 17th this land was no longer in sight. Nevertheless, by half past nine that morning we caught sight of a small island bearing, by compass, North N East of us at a distance of between 5 and 6 leagues. Additionally, there was another piece of land to be seen to the North N West approximately 9 leagues distant. Shortly afterwards we sighted yet another small island some 5 leagues away bearing North East 5° East; because this island bore some resemblance to Ushant we decided to bestow that name upon it. We continued upon this same tack, on a heading North E ¼ East, in expectation of being able to pass clear of all the land we could see. However, at 11 o'clock more land was sighted bearing East N East 5° North and to the East N East of us we could see breakers at, what appeared to be, at a continuation of the island we had named Ushant. To the North West of this island could be seeing yet another chain of breakers extending for a distance of half a league. The first island that we had seen also appeared to have a chain of breakers extending on both sides of it.

Every navigator who has had occasion to come into these waters has held in dread the thought of venturing into the seas to the South of New Guinea.

Every Captain's greatest concern is, of course, the possibility that his ship will become embayed, in some location resembling the Gulf of Carpentaria, and the associated difficulty of extracting himself therefrom. For this very reason it has always been considered prudent to attain the latitude of New Britain in good time and thereby ensure an identifiable landfall is made. This is why all ship's captains invariably follow the same established a route.

¹¹⁸ A shellfish similar to a scallop.-JFF

Extremities to which we become reduced.

We, however, had chosen to open up a new path; but, for the honour of being its discoverers, this turned out to be a decision for which we were to pay a high price. Unfortunately, the greatest of our enemies was aboard the ships themselves in the form of the dreadful hunger we were suffering. The shortage of food had reached such a desperate point that I had been forced to make a considerable reduction in each man's daily ration of bread and vegetables. It had even been necessary to take steps to prevent the men from eating the leathern servings around the yardarms or what other bits of old leather they could lay their hands on. I knew from experience that the consequence of this practice would be far more injurious to the men's stomachs than would starvation itself.

Of the livestock we had taken on board in the Falkland Islands there remained on board but one single goat; she had since that time been our companion through all our good and bad times. Every day, without fail, she had given us a little milk. Nevertheless, the affection between us, developed over such a long association, was rendered inconsequential by the irresistible sensation gnawing at our bellies; and so it was, with heartfelt and profound regret, that I authorised her death sentence. The ships butcher, who had cared for her and fed her over these past many months, slaughtered her, to alleviate our hunger, with tears streaming down his face. Shortly after this a young dog that we had taken on board in the Straits of Magellan suffered the same sad, but unavoidable, fate.

On the afternoon of the 17th, the prevailing current being favourable to us, we kept well to the windward of the island of Ushant and all the hazardous reefs associated with it; we then, once again, resumed our North N Easterly progress.

It was a great disappointment to us when, at four o'clock that afternoon, we discovered that the breakers extended much further than we have at first anticipated. Although we were unable to determine their exact extent we were sure that they stretched at least as far round as the East N East. Thus it became necessary to return onto our South S Westerly course and later, with the coming of daylight, we turned our stem towards the east. During the course of the 18th, we saw no land at all and, as a consequence, we allowed the hope to arise in our hearts that we were finally clear of all the breakers and little islands.

Our joy was of extremely short duration; at one o'clock in the afternoon another island appeared on a compass bearing of North E $\frac{1}{4}$ North and within a short space of time it was followed by 9 or 10 more stretching away even as far as East N East. Beyond these islands some other land could be seen at a distance of about 10 leagues. This land was of a greater elevation than the islands themselves and extended to the north-east.

All the following night we cruised back and forth and then, with the coming day, we beheld the spectacle of a double chain of islands extending along an approximately east-west axis. Furthermore, to the south of us, there was another group of small islands; all of these islands were connected, one to the other, by reefs which barely broke the surface of the sea. To the north of all of them we could see land that was of a more elevated nature. The lands that we discovered on the 20th appeared to us to run rather less to the southward and appeared to lie on a line extending toward the East S East. This circumstance prompted me to reappraise the situation we were in. In consequence, I resolved to run boards of 24 hours duration because the more frequent changes of course we were currently making was consuming too much time. During this time the sea was extremely rough, the wind most violent and always from the same point of the compass. These trying circumstances, together with the deteriorated condition of our masts and our now damaged rigging, made it essential to limit the area

of sail we carried. Our ships were no longer sailing well for they were not in good trim and were long overdue for careening.

At daybreak on the 25th we sighted land bearing from north to North N East; this however, was unlike some of the low-lying land we had previously encountered. It was, on the contrary, very mountainous terrain and it appeared to terminate in a great cape. It seems most probable to us that this land continued on towards the north. All that day we steered a course of between North East $\frac{1}{4}$ East and East N East. During this entire time we observed no other land to the east of us other than the cape we had previously doubled with such an indescribable sense of satisfaction and such a heartfelt sigh of relief. On the morning of the 26th, this cape, now being a long way to leeward and there being no other land to windward of us, we once again resumed our course towards the North N East.

Finally, we double the land comprising the gulf.

We had desperately prayed and for so long, to see this cape astern of us that we gave it the name Deliverance Cape. The Gulf, of which Deliverance Cape forms the most easterly point, we named the Gulf of Louisiade. This was land that I firmly believed we had well and truly earned the right of naming. During the 15 days we spent in this gulf we were frequently beset by currents that pushed us to the eastward of our projected course. On the 26th and the 27th we were subjected to very strong winds, mountainous seas and, from time to time, squalls which seriously affected visibility. During this entire, unpleasant, period we had found it impossible to proceed during the hours of darkness. Since having cleared Cape Deliverance we had made a northerly gain over the ground of some 60 leagues; then, on the morning of the 28th, we sighted land to the north-west of us at a distance of 9 or 10 leagues. This turned out to be two small islands the most southerly of which, at eight o'clock that same morning, was on a compass bearing of North W $\frac{1}{4}$ West. On the same day another extensive and elevated landmass came into sight the extremes of which bore between East S East to East N East. The land of this new sighting extended all the way towards the north and, as we continued our course towards the north-east, we could see that it extended further than we had first thought because, at this point, it took a turn towards the North N West. It soon became apparent to us that the run of this coastline was interrupted either by a channel or by the opening of an extensive bay, for we thought we could see land in the distance and beyond the opening.

More islands are sighted.

On the morning of the 29th the coastline, that we could see to the East of us, continued to stretch away towards the north-west as far as the eye could see and beyond our horizon. I determined to approach more closely and to coast along it in the hope of finding an anchorage. At three o'clock in the afternoon, we being about 3 leagues from the shoreline, our soundings revealed a depth of 48 fathoms on a bottom of white sand mixed with broken shells. We came up towards a small cove that had the appearance of being suitable for mooring; but unfortunately, before we reached it the wind fell away to a dead calm and during all the remainder of that day we made no further progress. The following night we lay off the coast making short boards. At dawn on the 30th I sent away the ship's boats under the command of Chevalier de Bournand with instructions to explore the various small coves along the coastline and assess their suitability as an anchorage. The ground indicated by our soundings, at the position where we lay offshore, gave us every cause to be optimistic.

Under a light spread of canvas I came on in the wake of the ship's boats in immediate readiness to put down my anchor on receiving a favourable signal from the Chevalier.

Description of the aborigines.

Just before 10 o'clock a dozen canoes of varying sizes, made an approach toward the ships but then held off a short distance from us; they appeared unwilling to come alongside. The largest of these canoes had a crew of 22 men, the medium-sized ones 8 or 10, whilst the smallest of these craft had a crew of only two or three men. These canoes, all of them considerably raised at the stem and stern, gave the impression of being skilfully constructed; they were the first of a type not fitted with outriggers that we had seen in these waters.

The race of people who occupy the lands in this region have skin as black as that of the Negroes in Africa; their hair is tightly curled and worn long, sometimes it is of a russet colour. They were wearing bracelets, breastplates and plaques around their foreheads made of some white material; of its exact composition I am unaware. They were all armed, carrying bows, arrows and short spears (*sagayes*). They shouted bloodcurdling cries at us and made the most infernal racket giving us the impression that they were far from being a peaceful people.

At 3 o'clock I made a recall signal to the boats and when the Chevalier de Bournand arrived back on board he reported that he had found an excellent holding ground of sandy-ooze in depths of 30, 25, 20, 15 and 11 fathoms; unfortunately, almost everywhere the roadstead was exposed to the predominantly prevailing winds.

Unsuccessful attempt to find an anchorage.

The Chevalier also reported that in all the extent of this coastline he had investigated no rivers save for the one and only very small brook had been seen. We were of the opinion that making a landing upon this open coastline would be almost impossible due to the heavy surf beating violently and unrelentingly along its entire extent. Immediately adjacent to the water's edge the terrain sloped steeply towards the mountains and was entirely trees covered. The Chevalier also reported that in some of the small coves he had seen a few huts, even though it was generally considered these people lived mainly in the mountains.

While making its way back to the ship the small jolly boat was pursued by three or four of these canoes; the crews of which it appeared were intent on making an attack. One of the occupants went so far as to take up a stance in readiness to throw his spear in their direction, but, in the event did not do so and no attack actually took place.

The situation in which we now found ourselves remained no less critical than it had been during the previous several days. We still found ourselves hedged in on all sides by unknown lands. About us now we had land from the south to as far as the North N West; from the east to the north and also from West $\frac{1}{4}$ S West to as far as the north-west. It was also most unfortunate that our horizon, from north-west right round to North N East, was so obscured by mist and thus it was impossible to see land at a distance beyond 2 leagues.

I fervently prayed, while we were in this uncomfortable situation, that good fortune would smile on us and reveal a passage allowing us to escape from these hostile coast-bound waters. We had by now, no matter what, progressed much too far to make returning, by the way we had come, a practical proposition.

Some of our people considered there was a strong current coming from the north and was setting us in a south-easterly direction. This gave us cause to believe that such a fervently hoped for passage might exist. The strength of this current acted upon us most forcibly between 4 o'clock and half past 5 that evening. We found that steering our desired course became very difficult, even though our ships were being pressed forward by a good stiff breeze. By 6 o'clock that evening the strength of the current had become considerably less. During the following night, we were beset by frequent and heavy downpours of rain; we sailed towards the south or the South S West on one tack and between the East N East and north-east, on the other one.

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On 1st July, at 6 o'clock in the morning, we found ourselves back at exactly the same spot where we had been the previous evening. This was confirmation that the tidal current in this location both ebbed and flowed. The course we had steered was from north-west to North W $\frac{1}{4}$ North. At 10 o'clock we nosed our way into a passage between the land extending to the east of us and that on our western side; this strip of water was between 4 and 5 leagues in breadth.

A dangerous stretch of water.

Whilst within this passage we experienced a powerful tidal stream alternating between south-east and north-west; at its centre there was a race running athwart it. In this location the sea piles up and breaks giving the impression that rocks were situated there just at sea level. I named this confused patch of water "Denis' Race" (*Raz Denis*) in honour of the Sailing-Master of the Boudeuse, a man of excellent qualities, who had faithfully serve his King for a great number of years. The Etoile on making her way through this passage, two hours later than we did and further to the west of our track, had found herself in water only 5 fathoms deep over a rocky bottom; whilst we, in the frigate, had had soundings of 44 fathoms over a bottom composed of sand, gravel, seashells and coral. During these several hours the sea was of such a tempestuous nature that we were compelled to batten-down our hatches. To the eastward of us the terrain along this coastline became less elevated and started to turn away more to the northwards.

We continued our way and had attained something like the half-way point through the passage when we had the good fortune to sight a bay that appeared might provide a safe anchorage. By this time the sea had become calm and the tidal stream, which continued to run strongly toward the north-west, carried us on its bosom until, within the twinkling of an eye, we had passed beyond it. We immediately hauled our wind with the intention of entering into the bay however, at half past eleven we were subjected to a torrential cloudburst which reduced visibility to the extent that we lost sight of both the land and the sun. As a consequence we were forced to postpone our reconnaissance this most promising bay.

A new attempt is made to make a landing.

At 1 o'clock, that same afternoon, I sent off the ship's boats, each with an armed crew under the command of the Chevalier d'Oraison, *Ensign de Vaisseau*.¹¹⁹ He was under orders to take soundings and otherwise assess the suitability of the bay as an anchorage.

While the ship's boats were engaged in their work we attempted to keep station close enough to them to be able to communicate via signals. The weather was excellent, but, unfortunately, there was very little wind. At three o'clock we could clearly see below us, in a water depth of 8 to 10 fathoms, the rocky nature of the seabed. At four o'clock the boats signalled to us that the bay was suitable as an anchorage; we then, with every sail spread to catch the least breath of wind, manoeuvred to try to come up to them. The wind, however, was extremely light and the current was also against us, so, once more at five o'clock, we passed over the rocky bank making soundings of 10, 9, 8, 7 then, finally, 6 fathoms.

We could see to the South S East of us at a distance of about a cables length¹²⁰ an area of disturbed water which indicated the water depth there was no more than 2 or 3 fathoms. We steered towards the north-west and to the North West $\frac{1}{4}$ North and in so doing gradually increased the depth beneath the keel. I made a signal to the Etoile to veer off in order to avoid this shallow area and sent one of our boats over to her that it might guide her to the anchorage.

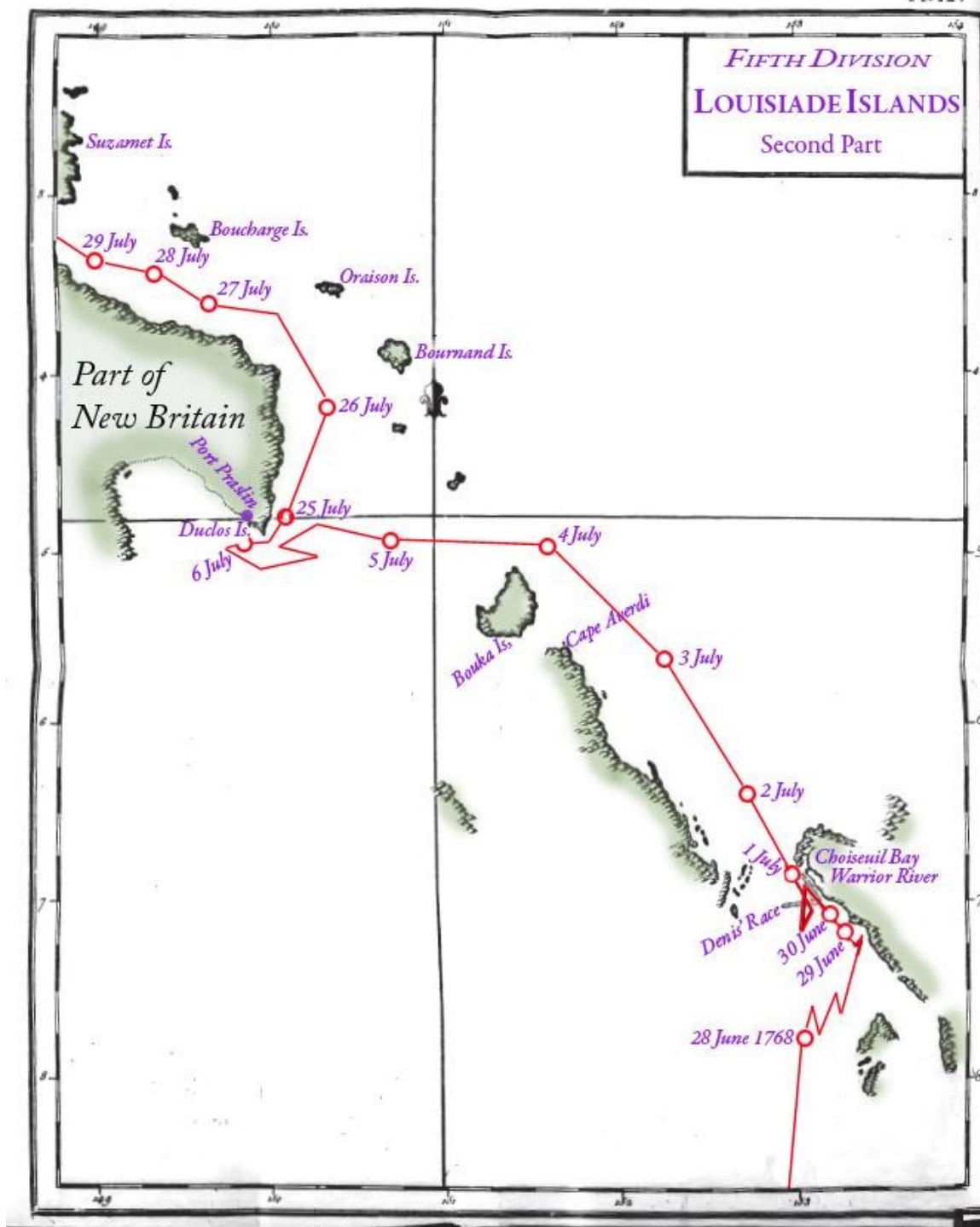
Regrettably, we were making no headway at all; the wind was insufficient for us to make way against the current and darkness was rapidly approaching. During the course of the entire past two hours we had gained no more than half a league over the ground. Thus it was impractical to approach the anchorage in the rapidly failing light, surrounded as we were by known areas of shoal-water, and we were, reluctantly, compelled to abandon the attempt.

I set my course to the West $\frac{1}{4}$ N West and West N West in order to have some sea-room about me, and so, sounding continuously as we went, made for more open water. As soon as we were abreast the land's most northerly point I bore away towards the north-west and subsequently to the North N West then, finally, to the north.

At this point I will return to the expedition that was undertaken by our ship's boats and relate the details of the events befalling them.

¹¹⁹ *Ensign de Vaisseau* – the rank below Lieutenant in the in the French navy.-JFF

¹²⁰ $\frac{1}{10}$ of a nautical mile. (183 metres or 200 yards).-JFF



The aborigines attack our boats.

Before making their entrance into the bay the boats, sent out to make the survey had coasted along the promontory forming its most northerly point; here they had sounded depths between 9 and 13 fathoms on a bottom of sand and coral. They then entered into the bay proper, and, at a distance of about a quarter of a league within its confines, they found an excellent mooring which provided shelter from the south-east to the south-west and, in passing through east, right round to the north. The water depth in this Anchorage varied from 9 to 12 fathoms on a bottom of grey sand and gravel. While the boat's crews were occupied taking soundings they saw 10 canoes coming in through the entrance of the bay. These vessels were manned by about 150 men armed with bows and spears; each warrior was carrying a shield. The canoes had emerged from a small cove into which a small river discharged; along the banks of this river a great number of huts were to be seen. This small flotilla approached under oars and in a disciplined formation. When they judged themselves at an appropriate distance, they quickly divided themselves into two groups; the obvious intention being to encircle our own boats. The warriors in the canoes began to make bloodcurdling cries, then, taking up their weapons, they commenced their attack. It was obvious that they considered a mere handful of adversaries an easy target and that their assault would certainly meet with success. The boats crews first fired a volley over their heads, but, that didn't deter them for they continued firing arrows and throwing spears. They held their shields to cover their bodies, as if they believed this would protect them against any conceivable harm. The crews of the boats now fired a second, and, this time, deadly discharge. This volley was totally successful in putting the attackers to flight; many of the warriors abandoned their canoes and started swimming towards the shore.

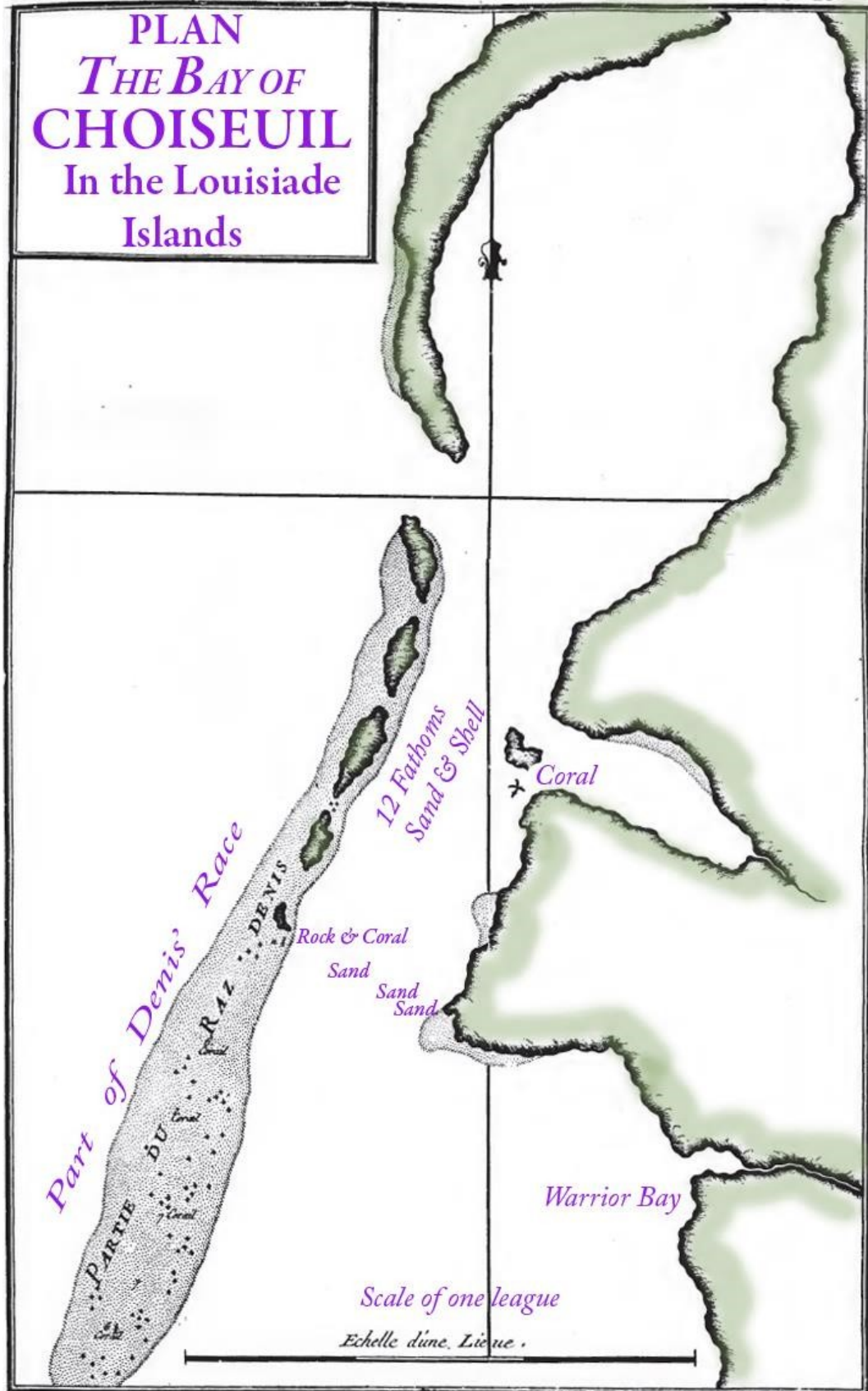
Description of their canoes.

Our men took two of these abandoned canoes as prizes; they were quite long vessels and well-made, the bow and stern being raised up in such a manner as to protect them from arrows fired at them from any enemy dead ahead. Aboard one of these canoes we discovered the carved effigy of a man's head. The eyes were crafted from nacre and the ears had been fashioned from pieces of turtle shell. The face of the object, which included a beard, had lips painted a brilliant red colour; in its entirety the thing resembled some manner of mask.

In some of the other canoes our men found bows, a great quantity of arrows, spears, shields, coconuts, some other nuts (the species we could not identify), arecca, several small tools and utensils that these people use for various purposes, fishing nets of very fine mesh which were extremely skilful manufactured and a human jawbone that had been partially charred.

Description of the aborigines.

The people in this locality are black and have tightly curled hair which they colour light yellow and red with some sort of pigment. The temerity they showed in their attack upon us; the manner in which they handled their weapons, both of an offensive and defensive nature and their readiness to deploy them in the unprovoked manner they had demonstrated showed them to be a race of people who are almost constantly in a state of war.



During the entire course of this voyage it has been our general observation that, of all the people we have encountered, those having black skins are very much more cruel and aggressive than those whose skin colour tends towards white. These particular people go about entirely naked with the exception of a small band of woven stuff covering their genitalia. Their shields are oval in shape and fabricated from reeds closely woven into a double layer. This is done in such a fashion that they are completely impenetrable to arrows. We named the river from which these courageous souls had launched their attack upon us Warrior's River. To the bay, and the island within the bay itself, we gave the names Choiseul Bay and Choiseul Island¹²¹. The promontory which extends from the island on the North side of the bay is entirely covered with coconut trees.

Events occurring subsequent to our discoveries.

During the following two days we had very little wind. After having made our way to the other side of this passage we found, to the west of us, a long and mountainous coastline the highest peaks of which were lost to sight amongst the clouds. On the evening of the 2nd Choiseul Island was still in sight of, but, by the morning of the 3rd the only land we could see was the amazingly elevated land we had observed previously, when we came out of the passage. This coastline runs away to the North West $\frac{1}{4}$ West; its northernmost part appeared to us to end in a point, only slightly declining in height as it approached the sea, where it formed a most remarkable Cape. I gave it the name Cape Averdi (*cap l'Averdi*).

By midday on the 3rd this cape still remained visible at a distance of some 12 leagues bearing West 5° North by compass. We obtained an observation of the sun's meridian altitude which gave us the opportunity to accurately determine the latitude of this cape. In this locality the clouds, which during the day obscure the summits of the mountains, evaporate away as the sun begins to set and so reveals the magnificent grandeur and the incredible height of these towering summits.

On the morning of the 4th the first rays of the rising sun revealed more land further to the west of Cape Averdi. This new land, somewhat less elevated than the other, extended towards the North N West. Between the South S Easterly point of this land and Cape Averdi there is a vast, wide-open, space that was either another passage or a gulf of some considerable proportions. In the far distance we could see a range of small hills; beyond the coastline in the hinterland we could see one hill, although part of the same range, standing higher than all the others. For the remainder of that morning we sailed as close in as was practical in order to come up to this low-lying land. By noon, we had approached it to within a distance of 5 leagues, by this time its North N Westerly point was bearing South W $\frac{1}{4}$ West from us.

Description of the aborigines who approached our ships.

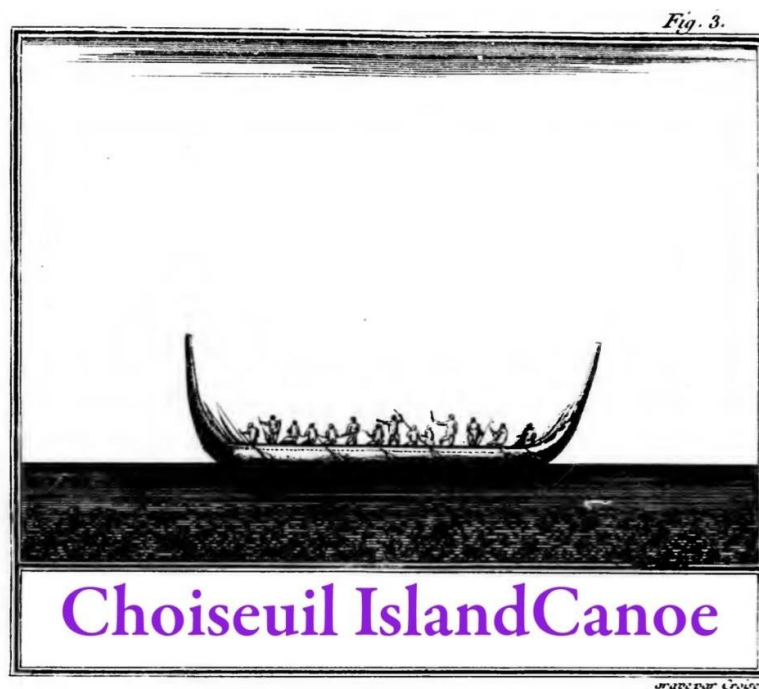
That afternoon 3 canoes, with 5 or 6 Negroes in each, came out from the land until they were sufficiently close to us to make a detailed examination of our ships. They came within musket shot and remained there for a full hour until, finally, they responded to our invitation to approach more closely. We attached some small gifts to pieces of wood and threw them towards them with the object of increasing their confidence.

¹²¹ Today it is called Choiseul Island.- JFF

At last they brought their canoes alongside us and held up coconuts for us to see while continuingly calling out “*bouca, bouca, onelly*”. They kept this chanting up for some considerable time until, finally, we in our turn, called the same phrase back to them; this seemed to give them considerable pleasure. They did not remain alongside us for very long, but, by signs, they made us to understand they were going ashore to bring back coconuts for us. We shouted out our thanks and encouragement. However, the canoes had travelled no more twenty paces away from us when one treacherous member amongst them turned and fired an arrow in our direction. It was only by the greatest of good fortunes that none of our men was hit. They fled paddling rapidly away towards the shore; we for our part decided that such force as was at our disposal would make any retaliation grossly disproportionate and totally unworthy of us.

These Negroes were entirely naked. They had short tightly curled hair; their ears were pierced and the lobes extremely elongated. Several of them have their hair dyed red and some parts of their bodies had painted with white spots. It was obvious that they chewed the betel-nut for their teeth were deeply stained red.

We had observed that the inhabitants of Choiseuil Island did the same, for when we searched their canoes we found a quantity of betel leaves and little bags of a cosmetic substance made from areca¹²² and chalk. We obtained from these people a 6 foot long bow and some arrows that were tipped with an extremely hard wood. Their canoes are somewhat smaller than those we had seen at Warrior’s Cove and we were surprised to observe there was a total lack of similarity between their



respective methods of construction. The canoes at this location do not have an elevated prow or stern; neither were they fitted with an outrigger. They are, nonetheless, broad enough in the beam to enable two men to paddle while sitting side by side. This island, which we called Bouka¹²³ Island and it appears, judging by the great number of huts constructed there, and, from the crowds of people we saw going about their daily business, to be densely populated.

Mid-point along the coastline there was a great level area planted with coconut and other productive trees providing, to our eyes, the most pleasing of perspectives. I had the most ardent desire to discover some suitable anchorage along this part of the coast; unfortunately however, the wind was

¹²² Possibly henna, *Lawsonia inermis*, used to manufacture a reddish hair and skin colouring cosmetic since prehistoric times. -JFF

¹²³ Now Buka Island. -JFF

against us and the powerful current was carrying us rapidly north westwards. With every passing minute we became perceptibly separated from this enchanting rural panorama.

During the night we maintained a course that was as close as possible to South $\frac{1}{4}$ S West and South S West. By the following morning Bouka Island was already far astern of us, towards the east and the south-east. On the evening of the previous day we had seen from the masthead a small island rising over the horizon and bearing north-west and North West $\frac{1}{4}$ West by compass. We estimated that New Britain was now not very away and it was there that we intended to make our next port of call.

We call in at New Britain¹²⁴.

On the afternoon of the 5th we raised two small islands bearing between north and North N West, at a distance of 10 or 12 leagues and, at almost exactly the same time, another somewhat larger island between north-west and due west. At half past five that evening the shore of this last island, being the closest to us, was within 7 leagues bearing North West $\frac{1}{4}$ West; this part of the coastline was elevated and appeared to include several bays. Considering that our stocks of water and firewood had by now been completely consumed and that the condition of the sick members of the crew was deteriorating daily, I resolved to call in at this place. The following night we ran our boards in a manner most advantageous to keep this land under our lee. At first light on the morning of the 6th we were positioned 5 or 6 leagues distant from it.

As we approached more closely we perceived there to be yet more land towards the South S West of the island closest to us, it being some 12 to 18 leagues distant. This land was quite mountainous and had the appearance of being favourable to our requirements. By 8 o'clock that morning we had closed the distance between us and the first island to about 3 leagues. I sent the Chevalier du Bouchage with an armed party in one of the boats to make a reconnaissance and to attempt to find an anchorage. By one o'clock that afternoon we received a signal from him indicating that his search for an anchorage had been successful. I immediately steered towards the location where the detached survey boat had positioned itself and, at 3 o'clock that afternoon, we anchored in 33 fathoms of water on a bottom of fine white sand mixed with mud.

The Etoile moored closer to the shore than we did with at a depth of 21 fathoms of water beneath her. What became clear to us was that, had we not made this stop-over, there would have been a much higher risk of the sick amongst us failing to recover. But, to be completely truthful, those who had been afflicted with scurvy had not been dangerously so. It is nonetheless probable that had we not had the good fortune to have the opportunity of recuperating here, those who were so affected would have surely deteriorated the more rapidly.

An unexpected meeting.

During the first day that we were here we came across two huts and a canoe without outrigger on the banks of one of the small rivers lying at a distance of about a third of a league from our camp. We had the impression that they had been laid up. The canoe was very lightly constructed and in excellent condition. In its close proximity were the remains of several fires, some large calcined sea-shells and the carcasses and the heads of several animals; Mr de Commerçon informed us these were those of wild boar. It was obvious to us that other human beings had been here quite recently because we found in one of the huts some figs and bananas which were still quite fresh. We also believed we

¹²⁴ In fact Port Praslin is situated in New Ireland.-JFF

could hear the cries of men coming from the direction of the mountains. In this however, we were in error for the sounds we later identified as being those of a large crested pigeon. It was a bird with azure coloured plumage called, here in the Moluccas, "The Crowned Bird" (*l'oiseau couronné*). During the time that we spent on the banks of this river we made another, even more extraordinary discovery. One of the sailors, a member of my boat's crew found partly buried in the sand, while he was searching for clams, a fragment of a leaden plaque upon which could be seen what remained of some English words inscribed upon it --- HOR'D HERE

ICK MAJESTY'S.¹²⁵

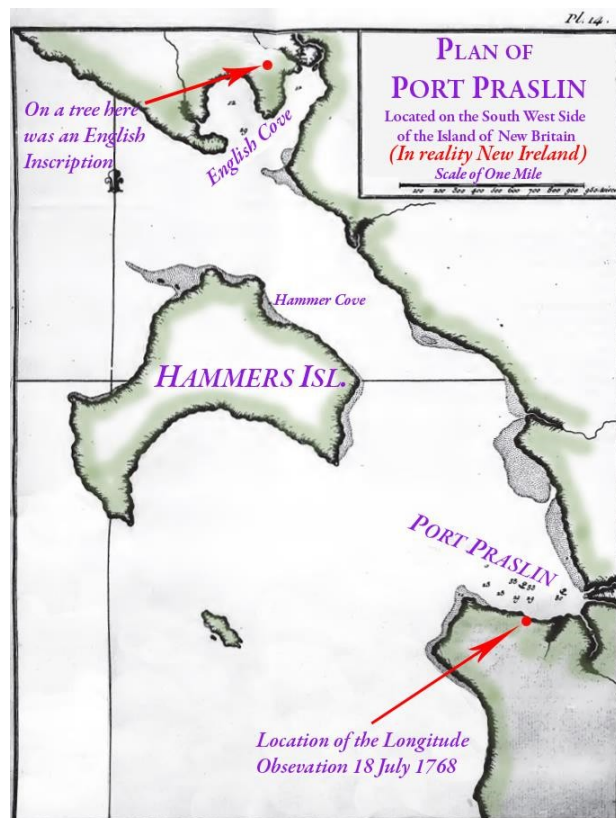
The plaque still retained the residue of the nails that had served to attach it to something and it did not appear to be particularly old. The inhabitants of this place had obviously torn the plaque down and had broken it into pieces. The finding of this object inspired us to make a more detailed reconnaissance of the immediate area of our anchorage. We ran along the section of the shore enclosed by the island at the mouth of the bay and then, after having covered a distance of about two leagues, we came upon an inlet, open towards the south-west, which although very deep had little breadth to it; we made our landing close to a fine river which flowed into this inlet at the point most remote from its opening.

We find traces of an English encampment.

As soon as we came ashore we noticed several trees that had been felled by means of a saw and upon which axe marks were still to be seen; obviously this was where the English had made their landing; it did not take us very long to locate the place where they had installed the inscribed leaden plaque. It was upon a very large tree that stood out distinctly in a clearing on the left-hand bank of this river.

Here, we reasoned, was the place where the English had set up their tents for we found the remnants of several tent guys still attached to trees and some of the nails which had attach the plaque remained embedded in the large tree.

It appeared to us that the plaque must have been torn down only a short time ago because its outline could still clearly be seen as a discolouration on the tree's bark. On the stumps of some of the trees that had been sawn down new shoots had appeared. The length of this regrowth indicated that the English had anchored in this bay sometime within the past four months. Despite the place being quite damp, the scraps of cordage we found there showed no signs of deterioration. There is no doubt in my mind



¹²⁵ My guess is:

"ANCHOR'D HERE – BRITANNICK MAJESTY'S.-JFF

that the vessel that had called in here was none other than The Swallow, a 40 gun ship commanded by Mr Carteret; he having sailed from Europe during the month of August 1766 in company with the Dolphin under the command of Mr Wallace¹²⁶.

Subsequently, we learned news of these vessels when we arrived in Batavia; I shall give an account this a little later. As it turned out, we had followed almost in the wake of these two ships all the way from Europe. By the most unlikely coincidence, amongst all this expanse land and sea, we had chosen come ashore at the exact same location where this rival nation had left a monument to a mission so very similar to our own.

It rained almost continuously right up until the 11th. [July] Beyond our snug anchorage, protected as it is in all directions by the high mountains which encircle it, a full gale was raging. Despite the foulness of the weather we made haste to complete our repairs, water ship, take on firewood and whatever other provisions we could find. I took the opportunity to under-run one of our cables and to weigh an anchor in order to make a better assessment of the nature of the seabed. We found it to be as good a holding ground as one could wish for.

The natural resources of this country.

Our most pressing concern was to discover what resources were available here in the form of foodstuffs. We were particularly desirous of items suitable for the sick amongst us, but, also to supplement the diet of all our crewmen. The searches we made were, however, not very fruitful. The fishing was not very productive; in the woods we found only latan palms and palm kernels and these only in very small quantities. Consequently, we were galled at having to dispute the possession of these limited resources with the enormous ants that swarmed in great numbers at this place. It even became necessary to abandon, to armies of these insects, some of the trees we had cut for firewood. It is true that we did see 5 or 6 wild boar, known here as red pigs.¹²⁷ These animals, from the moment they were first sighted, became the constant quarry of our hunters. These beasts were pursued relentlessly without, however, a single one of them ever being killed. This was the only quadruped we ever saw in this place, although several of our people believed they had recognised the tracks of the Tiger Cat. We also killed several large pigeons which were of very beautiful appearance. Their plumage was green with a golden sheen, their throats and breasts a greyish white and upon their heads was displayed a small crest. We also saw here Turtledoves, Widow-Birds (bigger than those we had previously seen in Brazil), Parakeets, Crown Birds and an unknown species of bird, the cry of which strongly resembled the barking of a dog. There was not a single one amongst us who had not been fooled by this, most “un-birdlike” call, on hearing it for first time.

There were also turtles here, but, this was not the time of the year when they lay their eggs. In the bay where we had anchored there were many beautiful small sandy coves; in these I am sure, at the right season, it will be possible to gather a great quantity of their eggs.

All the countryside hereabouts is mountainous; the soil is light in texture and so thin that it barely covers the rocky substrata. Nevertheless, the trees grow to great height and amongst them are several species of very beautiful timber trees. Here are to be found are the betel, the areca and the beautiful East Indian rush. This plant is normally obtained in Malaya; here it grows in marshy places but there

¹²⁶ Samuel Wallace & Phillip Carteret sailed from Plymouth 22 August 1766 on an expedition to the South Pacific; one of their objectives was to find the fabled Southern Continent (Terra Australis).-JFF

¹²⁷ Probably the babitusa, *Babirousa celebensis*.-JFF

were no really exceptional examples to be gathered here; perhaps because the ground is shaded by trees which deplete the soil and stunts their growth or maybe because we were not here at its season of maturity.

The pepper tree is also common here but, again it was out of season for there were neither flowers nor fruits to be seen. Generally speaking the location was not very botanically diverse. Additionally, we could find no traces that men had ever been permanently resident here. But it appeared certain that from time to time men landed here because, close to the water's edge, we frequently came across their temporary camps; these were easily identified by the remains of meals they had prepared.

On the 10th one of the sailors aboard the Etoile passed away. The illness which caused his death was of a complicated nature but it was not in any way related to scurvy. During the next three days we enjoyed excellent weather and made good use of them. We refitted the heel of our mizzen mast, the step of which had become rotten. The Etoile shortened hers for the head of it had become sprung. We took on-board from the store ship that portion of the flour and biscuit which, in the ratio of our number to the crew of the Etoile, belonged to us. As it turned out there remained fewer pulses than had been previously believed, and, in consequence, it became necessary to reduce by more than one third the quantity of the dried beans we used to make our soup. I stress the word "our", for everything we had we always distributed equally amongst us.

We suffer from a severe shortage of rations.

Those of us in the wardroom ate exactly the same provisions as did the sailors on the mess decks. The cruel state of near famine in which we found ourselves, like death itself, rendered all of us equal one to the other. Nevertheless, we took the opportunity during this excellent weather to make accurate and essential astronomical observations.

On the morning of the 11th [July] Mr Verron set up his quadrant and second-marking pendulum on the shore and, on that same day, used these instruments to observe the meridian altitude of the sun; the pendulum's motion being confirmed with exactitude by corresponding altitudes taken on the two following days. On the 13th there was predicted to be an eclipse of the sun that would be visible in our location. It would be necessary for us to make suitable preparations in order to observe it properly; that is assuming that the weather remained clear. Fortunately, the weather on the day of the eclipse was exceptionally fine and both the moments of immersion and emersion were clearly visible to us.

Longitude observations.

Mr Verron made his observations using a 9 foot long telescope; the Chevalier du Bouchage with the 4 foot Dolland¹²⁸ achromatic telescope whilst I took charge of the pendulum. The the eclipse, at the place we were located on the morning of the 13th, began at 10 o'clock 50 minutes and 45 seconds and ended at 28 minutes 16 seconds after midnight, actual time. The magnitude of the eclipse being 3' 22". At the exact spot where the pendulum had stood we buried a plate bearing the inscription "Port Praslin", that being the name that we had given the place.

¹²⁸ John Dollond (1706 - 1761) was an English optician of Huguenot stock, known for his successful optics business and his patenting and commercialization of achromatic doublets.
http://en.wikipedia.org/wiki/John_Dollond .-JFF

The observation we had made was even more important because, by its means combined with the observations we had previously made on the coast of Peru, it has been possible to determine the exact longitudinal extent of the Pacific Ocean, which, up until this time, had not been determined with certainty. We were particularly pleased that the weather had been exceptionally fine during the entire duration of the eclipse because from that time, until our departure, there was not a single day when the weather could be described as anything but atrocious. The visibility was such that one could hardly see a hand in front of one's face and the continually torrential rain, together with the stifling heat, made the time of our stay here almost unsupportable.

By the 16th, [July] we in the frigate, had completed all the maintenance that was necessary and we sent our boats over to the Etoile in order to assist them. The store-ship was now somewhat light in the water, and, as it was impossible to find suitable ballast stones hereabouts, it became necessary to cut timber to fulfil that function. In the middle of these perpetually humid forests this was work of an arduous, painful and unhealthy nature indeed.

Description of two insects.

Every day we killed snakes, scorpions and a most unusual species of insect. They were as long as a finger and had a body entirely covered with a carapace; they had six legs; points (which stick out from their sides) and an exceptionally long tail. I also had brought to me an animal of extremely extraordinary appearance. It was an insect about 3 inches long belonging to the mantis family; almost its entire body was comprised of a tissue that appeared, even under the closest scrutiny, to be the leaves of a plant; each of its wings forming one half of the leaf, which, when the wings are close together, gave the effect of being an entire leaf. The underside of its body gives the illusion of it being a dead leaf even more strikingly than does its upper part. The animal has two antennae and six legs of which the upper parts add to the overall leaf-like effect. Mr de Commerçon has made a detailed description of this insect; a specimen of it, preserved in alcohol, has been placed in the King's cabinet. A great number and variety of sea shells, some of them exceedingly beautiful, are to be found here; the reefs are a most excellent place to study conchology. We collected in one place ten hammer-shells;¹²⁹ of a species that is said to be extremely rare.¹³⁰ Hence the enthusiasm displayed by our sailors to find more of them, increased dramatically; that is until it received a sudden check resulting from an accident affecting one of our sailors.

A sailor is bitten by a sea snake.

While he was hauling the seine net up onto the beach one of the crewmen was bitten by some sort of a sea snake. The effect of the venom manifested itself within half an hour; when the sailor began to feel violent pains in every part of his body. The location of the bite itself, which was on his left side, became inflamed and swollen even as we watched. We made four or five scarification below the wound by which means a great quantity of envenomed blood was drawn off. We got the man to his feet and forced him to walk about. If we should stop this treatment, even for an instant, he straightway would begin to convulse.

¹²⁹ A species of *Maleus*, a marine bi-valve related to pearl oysters.-JFF

¹³⁰ They were found in a small cove, off the large island, of which this bay is part. For this reason we named the place Hammers Island (*l'île aux Marteaux*).- Bougainville

He suffered most dreadfully for five or six hours until the effects of the Thériaque¹³¹ and Eau de Luce¹³² we had administered, less than half an hour after he was bitten, produced such copious sweating that the poison was drawn out from his body.

This incident made all the members of the ships crews think twice before entering into the sea. Our Tahitian followed with curiosity the treatment and the progress of the sick man for the entire duration until his recovery. He told us that there were sea snakes along the coast in his own country that bit men while they were in the water and that, without exception, every one that had been bitten died as a result. He said that although they did have a medicine for snakebite, it was not very effective. He was amazed to see that four of five days after the accident the sailor had returned to his work.

Very often Aotourou, when he was a witness to the employment of a skill or the use of equipment, the effect of which was to multiply the efficacy of the arts and faculties with which we are endowed by nature, became totally rapt in admiration for us and somewhat woebegone, blushing in embarrassment at the paucity of knowledge in his homeland. "*Aouaou, Taiti, fi de taiti*" he would say to us regretfully. That, however, is not to say he enjoyed being made aware that our nation was technically superior to his own and it was quite difficult to believe how very haughty he could be. However, on frequent occasions we observed that his personality was sufficiently flexible to enable him to mask his hubris, when it suited his purpose. This characteristic is proof of the fact that he lives in a country where the population is divided into several very unequal ranks; it revealed also the rank to which he himself belonged.

We are subjected to dreadful weather.

In the evening of the 19th we had completed all necessary preparations for our departure; but, the weather showed every indication it was going to deteriorate considerably. The wind was blowing very strongly from the south, rain was lashing down in sheets, thunder rent the heavens with deafening explosions and raging squalls tormented the atmosphere. Beyond the shelter of the harbour at great sea was running and all the gulls, habitually on the open ocean in search of fish, had taken refuge along with us within the confinement of the bay.

Earthquake.

On the 22nd [July], just before half past ten in the morning, we felt several shocks resulting from an earthquake. The trembling it caused was felt very distinctly even aboard the ships and lasted for about two minutes, and, during this time, the sea rose and fell successively several times. This event caused great alarm to those members of the crew who were fishing on the coastal reefs; they straightway abandoned their lines and nets and sought refuge aboard the ships.

It appeared that it was completely normal, at this season in this locality, to be subjected to such incessant rainfall. It is almost as if one storm cannot wait until the preceding tempest to pass over before it begins its own torrential down-pouring.

The sky is almost continuously racked by the growl and crash of thunder. During the night and at times when the sky is particularly overcast, one is given an insight, or, one might even say, a foretaste, of the chaos that obtains in that abyss that is at the entrance to hell.

¹³¹ A remedy for snakebite made from, amongst other things, the dissolved flesh of an adder.-JFF

¹³² A composition made from volatile caustic salts and oil of amber; said to be a cure snake bites.-JFF

Our attempts to find foodstuffs are unfruitful.

Despite the inclemency of the weather, we went into the woods every day in search of those species of palm trees which might provide us with something to eat and in an attempt to kill some turtledoves. We split ourselves up into several groups, but, the usual result of our forays was to return completely empty-handed and soaked to the skin. However, during the last few days of our stay we did discover some apple-like fruits on some sort of mango tree and, also, a type of wild plum which we named *Prune Monbin*. These items would have been of the greatest use to us had we discovered them earlier. We also came across a sort of aromatic ivy; our surgeons believed this plant might possess antiscorbutic properties. Indeed, it turned out that the symptoms of those patients who drank and bathed themselves in an infusion made from its leaves, showed some signs of improvement.

Description of a waterfall¹³³.

All the members of both the crews paid a visit to a marvellous waterfall cascading into the river used by the *Etoile* to fill its water-casks. The spectacular beauty of this wonderful phenomenon, the creation of unaided nature, in this isolated and uninhabited corner of the globe exceeded by far anything the art of man has ever achieved; be it even in the palaces of kings. We were filled with admiration by the groups of the rocky projections interrupting the water's downward course. These were graduated regularly in such a way that they precipitated and spread out the tumbling waters into individual cascades. We were amazed by the huge overhanging ledges in which a hundred irregular basins had been formed, each of them receiving, and, in its turn, pouring back the crystal-like water; water that was coloured by the towering trees overhanging the entire edifice. Some majestic specimens of these trees had their very roots washed by the waters within the basin itself. How blessed is the world that there are men with the ability and artistry to capture in paint these inimitable beauties. Beyond a doubt this captivating waterfall is worthy of the hand of the greatest painter ever to stand before an easel.

Our situation grows daily worse.

Despite the awe in which we held this magnificent spectacle our situation, for as long as we remain here, will continue to deteriorate. We knew in our hearts that unless we hastened our departure all would be lost. The degree and number of life-threatening symptoms, suffered by those afflicted with scurvy, inevitably continued to increase. The crew of the *Etoile* were unfortunate in that they were in an even worse state than were our own men.

Every day I sent out our ships boats in order to determine the state of the sea and the condition of the weather. There was no let-up; the demented wind blew constantly and viciously out of the south, piling up a huge and tormented swell before it. Under such atrocious conditions the resumption of our journey was totally out of the question. The situation was further exacerbated by it being necessary, before we could to make our way out of this port, to set a kedge-anchor that would be used to warp ourselves clear. Our present dearth of anchors made it imperative that we could be certain of later being able to recover this kedge by one of the ships boats. This evolution and the subsequent recovery of the boats themselves could never be accomplished while these mountainous seas persisted.

¹³³ See engraving by Ambroise Tardieu at: <http://www.scienceandsociety.co.uk/results.asp?image=10411731.-JFF>

On the 23rd the risk involved in making our exit, by the way we had come in, under the present weather conditions convinced me to make a reconnaissance of the passage between Hammers Island and the mainland. Indeed, we found that one such did exist by which, with a Southerly wind, we would be able to make our way out. It would mean that the boats engaged in the anchor-work would have to be recovered in the channel. It was obvious to us that this route had many disadvantages. Fortunately, as things turned out, we were not obliged to make use of it.

We leave Port Praslin.

It had rained without cease during the entire the night of the 23rd - 24th [July]; with the arrival of dawn, however, there came fine weather and a calm sea. We immediately weighed one of the anchors in the mooring-spread we had established; we sent a hawser ashore and had it made fast to a tree; we laid out a kedge-anchor with a heavy hawser and heaved-in on our main anchor cable until it was underfoot. During that entire day we waited for the most appropriate moment to set sail, and, as evening drew near, we became fearful it would be necessary to re-establish our mooring. Then, at half past five, an offshore breeze suddenly sprang up. We immediately cast off the hawsers securing us to the shore; we veered the kedge-anchor cable and passed it to the Etoile for her use when she, in her turn, was to make her exit. Within half an hour were under sail. The ships boats towed us until we were in the middle of the passage as; unfortunately, there was sufficient wind for us to make our departure without assistance. The boats were then dispatched to the Etoile to give her similar assistance. When we had attained a position 2 leagues offshore we heaved-to, and, while we waited for the Etoile to join us, we hoisted inboard our longboat and the other two small boats. By eight o'clock we could see the Etoile starting to make her way out of the port; the breeze dropped away as suddenly as it had sprung up and it was two o'clock the following morning before the Etoile came up to us. At this same time our barge re-joined us and we hoisted it inboard.

During that night we were beset by squalls and rain, but, by the following morning, good weather had returned. There was now a south-westerly wind blowing and we set courses between East $\frac{1}{4}$ S East and North N East so as to follow the changing attitude of the coastline; for we did not consider it prudent to pass to the windward of it. Our belief was, and everything we observed seemed to confirm it, that this land was a part of New Britain. Indeed, those lands that we had observed further to the west were, in almost every, detail similar to it.

We could see the crests of several mountains in what we had first taken to be a passage; we now considered them to be simply the elevated parts of a common land, the more low-lying sections of which were below our field of vision. Such is the picture that Dampier had portrayed when he described the great bay he had called St. George's Bay, and, it was here at its most north-easterly point, that we had but recently moored. We were able to confirm the truth of this a few days after our departure.

Dampier was more fortunate than we were in that he had located an inhabited region as a port of call; here he had been able to obtain fresh supplies¹³⁴. As a consequence of the rich and varied supplies of materials, he had the good fortune to acquire there; he had great hopes for the future prospects of this country. We on the other hand, even though we were as familiar and as experienced as he was in living off the land, had stumbled into a desert region in which it had been possible to obtain little more than wood and water!

¹³⁴ In December 1699 Dampier called in at Timor on his way to explore New Holland (Australia) As Bougainville says, he was very well served whilst there; both by the Dutch and the Portuguese.-JFF

As we were leaving Port Praslin I was able to correct my longitude by means involving making observations during an eclipse of the sun; such an event had, fortunately, occurred during the time we were there. The difference between the longitude so determined and my previously estimated longitude put our position 3° further to the east; a very significant difference. The thermometer during the entire time we were there registered constantly between 22° and 23° ; however, it seemed to us to be very much hotter than the thermometer indicated. The cause of this phenomenon I attributed to the quality of the air, it not being regularly refreshed because the basin is completely encircled, which is particularly the case from the direction of the prevailing winds.

CHAPTER VI

Passage from Port Praslin to the Moluccas; we make a call at Boero¹³⁵.

We were now back on the open ocean after an 8 days stay at Port Praslin; during the time we were there, as I explained in the previous chapter, the weather was unremittingly dreadful with strong winds blowing almost constantly from the south.

On the 25th [July] the wind backed and became variable from the south-east to east; we followed the direction of the coastline at a distance of about 3 leagues, and, as it almost imperceptibly rounded away, we came in sight of, and, towards the offing, a chain of islands one succeeding another away off into the distance. We passed between these islands and the mainland and I gave each of them the name of one of the ship's officers. There no longer remained even the slightest doubt that we were off the shore of New Britain¹³⁶. This entire coastline is very mountainous and there appeared to be many fine bays along all of its length. In these bays we frequently saw fires and other signs of human habitation.

Issue of new clothing to the ship's crew.

On the third day, after leaving Port Praslin, I gave instructions that the field-tents, we had used during our periods on shore, be cut up and the material used to manufacture trousers for the crews of both ships. We had made similar issues of clothing on several previous occasions. Had this not been done our sailors would not have been decently clad during such a long voyage for we had passed several times from a cold to a hot climate and back again. Many were the occasions when we had been soaked right through to the skin and had then been compelled to spent long periods in this uncomfortable condition.

Extreme shortage of foodstuffs.

To exacerbate our misery we had very little food remaining; almost everything had been consumed and I had been forced, yet again, to reduce by 1 ounce their daily ration of bread. Even the small amount of victuals that remained was, by this time, rotten to some extent. Indeed, under any other circumstances it would have been necessary to throw overboard all our salted meat. As things stood, however, we were forced to eat in order to live and, thus, it had become unavoidable that we ate the bad along with the good.

Who could predict when things would get any better? In our present pitiful; weakened as we were by all our past suffering, we remained condemned to endure yet more of the same misery. The very future in itself seemed to be the cruellest of our afflictions, for we were unable to set any limit to the duration of our difficulties. My own misfortunes were exacerbated by feelings of personal responsibility. I was deeply affected by the hardships my men were suffering. It must be emphasised however, that not one single member of the crew became downcast. No matter how severely the situation deteriorated, their patience and forbearance ever increased to meet each new challenge. The officers set an example of course, for nary an evening passed but the sailors continued their nightly

¹³⁵ Now called Buru Island.-JFF

¹³⁶ They were, in fact, off the eastern coast of New Ireland.-JFF

practice of dancing on deck, just as merrily on their empty stomachs, as they had before in times of plenty. It had not even been necessary to double their pay.

Description of the inhabitants of New Britain.

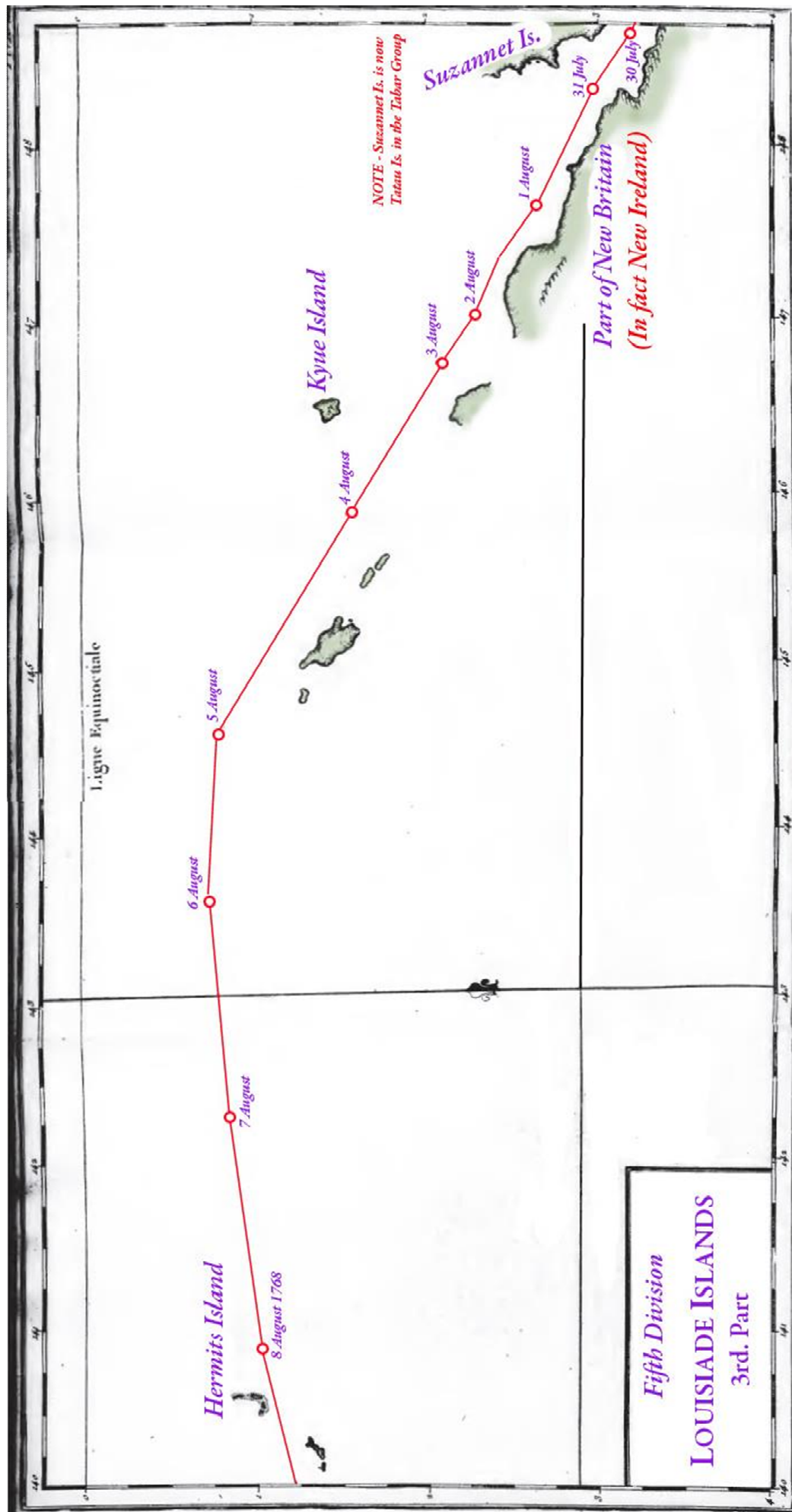
Right up until the 3rd of August we had the coastline of New Britain constantly in sight; during this entire time the winds remained light; it rained frequently; the currents were against us and our ships made slower progress through the water than ever before. The coastline tended more and more towards the west, and, on the 29th [July], we found ourselves closer to it than we had ever previously been. Our proximity to the shore justified several canoes making a visit out to the ships; 2 of them came within hailing distance of the Boudeuse, whilst another 5 approached the Etoile. Each of them was manned by 5 or 6 black men whose hair was tightly curled and woolly in appearance. The hair of some of them had been coated with a white powder. Each of them had a quite a long beard and they wore some sort of white ornaments on their arms in the form of bracelets. About their bodies, in lieu of clothing, they wore leaves which covered their nudity only as well as was possible for such primitive garments. They were all of tall stature and their bodies appeared to be agile and sturdy. They spread out before us some sort of bread and then, by means of signs, indicated they wanted us to go ashore with them. We in our turn invited them to come aboard the ships but our invitations, even after we had thrown some small morsels of cloth into the water for them, failed to inspire them with sufficient confidence to come alongside us. They collected the articles we had thrown to them from the water. As a way of thanking us one of them, using a sling, cast a stone in our direction which did not even reach the ship.

We, for our part, resisted the temptation to return hostility for hostility and they withdrew. As they retired they all banged on the sides of their canoes in union whilst crying out at the top of their voices. Their aggression towards the Etoile must have been of a more violent nature for we saw the discharge of several muskets from that ship. This had the desired effect of causing them to flee back towards the shore.

Their canoes are long and slender and equipped with outriggers; the sterns and prows of all of them are, to some degree, ornamented with magnificent red-painted carvings which reflect great credit upon the skills of their boat-builders.

The lie of the coastline

The following day an even greater number of canoes came out to us, and, this time, they had no hesitation about coming alongside us. One of their steersmen gave us the impression of being their chief; he carried a 3 foot long red painted baton with a spherical pommel on each end of it. As he approached us he thrust this object above his head with both hands and remained in this attitude for some considerable time. All of these Negroes seemed to have taken a great deal of trouble to appear at their best on this occasion; some of them had painted the woolly hair on their heads bright red; others boasted bundles of feathers in their hair; others still wore earrings made from some sort of seed; some had large white plaques hanging about their necks; some of them had rings hanging from piercings through the central part of their nostrils. The most common form of decoration however, common to almost all of them, was the wearing of bracelets sawn from some sort of seashell.



We were very keen to set up a trading relationship with this people and to have them bring out to us whatever refreshments they had access to. Unfortunately, their bad faith soon became apparent to us for they attempted to snatch away those items we offered to trade, but, refused to give anything in return. It was only with the greatest difficulty that we managed to extract from them a few yam roots. We gave up all attempts at dealing with them and they once again withdrew. That evening just as it was getting dark two canoes were seen stealthily approaching the ship; we fired off one of our distress rockets in their direction causing them to take flight immediately.

They attack the Etoile.

We considered the visits they had made to us during the past few days had been nothing more than occasions for reconnaissance in advance of an attack they were intending to attempt.

At dawn on the 31st we observed a great fleet of canoes departing from the shore in our direction; one part of their fleet passed abeam of us without stopping and all of them headed towards the Etoile, all of them keeping astern of her. No doubt they had determined that she, being the smaller of the two ships, was the easier target. The Negroes launched their attack by throwing stones and firing arrows. It was but a short battle. A fusillade of musketry soon made them reconsider the wisdom of their action. Some of the canoe crews threw themselves into the water, many of the canoes were completely abandoned and within a short space of time all the others were gone from our sight.

August 1768.

Description of the Northern part of New Britain.

The shoreline of New Britain now lay at an attitude between West $\frac{1}{4}$ N West and due west; the part, which we had by this time reached, was rather more low-lying in nature; no longer was the coastline steep nor was there, towards the hinterland, range after range of mountains. The part of this Northern shoreline now lying before our eyes was a land only modestly elevated above sea level and was thickly afforested for as far as the eye could see.

The first 5 days of August were extremely wet; the weather was stormy and with the wind there came frequent squalls. We caught no more than occasional glimpses of the coastline during the brief intervals when the visibility did improve; even then it was not possible to make out any detail.

Nevertheless, we were able to make out just enough to be aware that every day the prevailing currents continued to reduce the meagre progress we were making over the ground. I directed our course firstly towards the north-west and then to the North W $\frac{1}{4}$ West, in order to avoid the labyrinth that is formed by the islands lying spread out from the northern extremity of New Britain.

On the afternoon of the 4th we were able to positively identify the two islands that I believed to be those which Dampier had called Mathias Island and Stormy Island. (*île Matthias & île Orageuse*)¹³⁷.

Matthias Island, which is mountainous, extends away to the north-west for a distance of between 8 and 9 leagues. The other island is only about 3 or 4 leagues in length; between these two large islands there lies a smaller one.

On the 5th, at two o'clock in the morning, we saw something which we believed to be yet another island to the west of us, and, because of this, we altered our course towards the north. We were not mistaken, for at 10 o'clock the mist which up until that time had been very thick, dispersed and we

¹³⁷ Probably islands in the Manus Group. -JFF

clearly saw bearing South E $\frac{1}{4}$ South a small and low-lying island. The currents, which up until this time had pushed us towards the south and east, now ceased to affect us. This phenomenon seemed to be the result of us having passed the northernmost point of New Britain; a location the Dutch have named *Cape Solomswer*. We were, by this time, no further south than latitude $00^{\circ} 41'$. We sounded continuously every day without ever finding bottom.

Hermits Island.

We ran on westward, until the 7th [Aug.] with the benefit of a fresh breeze and fair weather. On the evening of the 7th, as the sun began to set we saw that, between west and West S West, the horizon was heavily veiled in mist; this gave me to believe there was land in that direction, as a consequence, I decided to hold a course South W $\frac{1}{4}$ West for the duration of the night, then, with the coming of daylight, we resumed our westerly track.

During that morning we saw some low-lying land directly ahead of us at a distance of 5 or 6 leagues. We set our course between West $\frac{1}{4}$ S West and West S West, in order that we should pass clear to the south of it. We coasted along it at a distance of $1\frac{1}{2}$ leagues. It was an island of approximately 3 leagues in length, completely devoid of high land, but, tree covered. The island itself was divided into 3 parts, each of which was linked to the other by reefs and sandbanks. Many coconut trees were growing on this island, and, close to the sea, a great number of huts had been constructed; from this we judged the island was densely populated. The dwellings we could see were tall, almost exactly square, and very well roofed. They had the appearance of being more spacious and better constructed than is normally the case with cabins made from reeds. Our first impression was that we were looking at houses identical to those we had previously seen in Tahiti. All around the island a great number of canoes were engaged in fishing; none of them appeared to be, even in the slightest way, concerned by our appearance.

It was almost as if they haven't noticed us. We judged that these totally incurious islanders, who showed no interest in us whatsoever, must have been completely contented with their tranquil existence. With this thought in mind we named the island Hermits Island (*Ile des Anchores*). Our lookout at the masthead reported that he could see another low-lying island 3 leagues to the west of Hermits Island.

The Archipelago to which we gave the name "The Chessboard".

The following night was very misty and there were some stationary clouds hanging over the southern horizon; this caused us to suspect the presence of land. Indeed, when the following morning dawned, we could see 2 small islands bearing South E $\frac{1}{4}$ South 3° South at a distance of 8 or 9 leagues.

By half past 8 that morning, with these islands still visible, we caught sight of yet another low-lying island, perhaps 2 leagues in length and bearing West $\frac{1}{4}$ S West. Shortly afterwards a great number of other small islands appeared which were spread out from it towards the West N West and the southwest. Properly speaking these were no more than a chain of islets, though barely above sea level they were covered with trees. To have come upon this obstacle, at this time, was something of a disaster for us. We could see, however, that one of these islets, which lay more toward the southward of all the others, appeared to be somewhat larger and more separated than were the majority.

We set our course to take us between this larger islet and the archipelago to which I had given the name "The Chessboard" (*l'Echiquier*). It was my intention to pass to the north of it, for we had no wish

to find ourselves hemmed in amongst this maze of tiny islands. When, upon the following morning, we were able to study this archipelago more closely it could be seen that it extended much further to the south-west than we had previously judged.

Danger to which we are subjected.

It had been our intention, as I have previously mentioned, to get clear by leaving this island to the south of us. However, as night descended we found ourselves still confined and having no idea of how far the land extended. The weather was continually squally and the poor visibility kept us ignorant of any dangers which might surround us. Our embarrassment, at the situation in which we found ourselves, was made considerably worse because with the onset of night the wind dropped away completely.

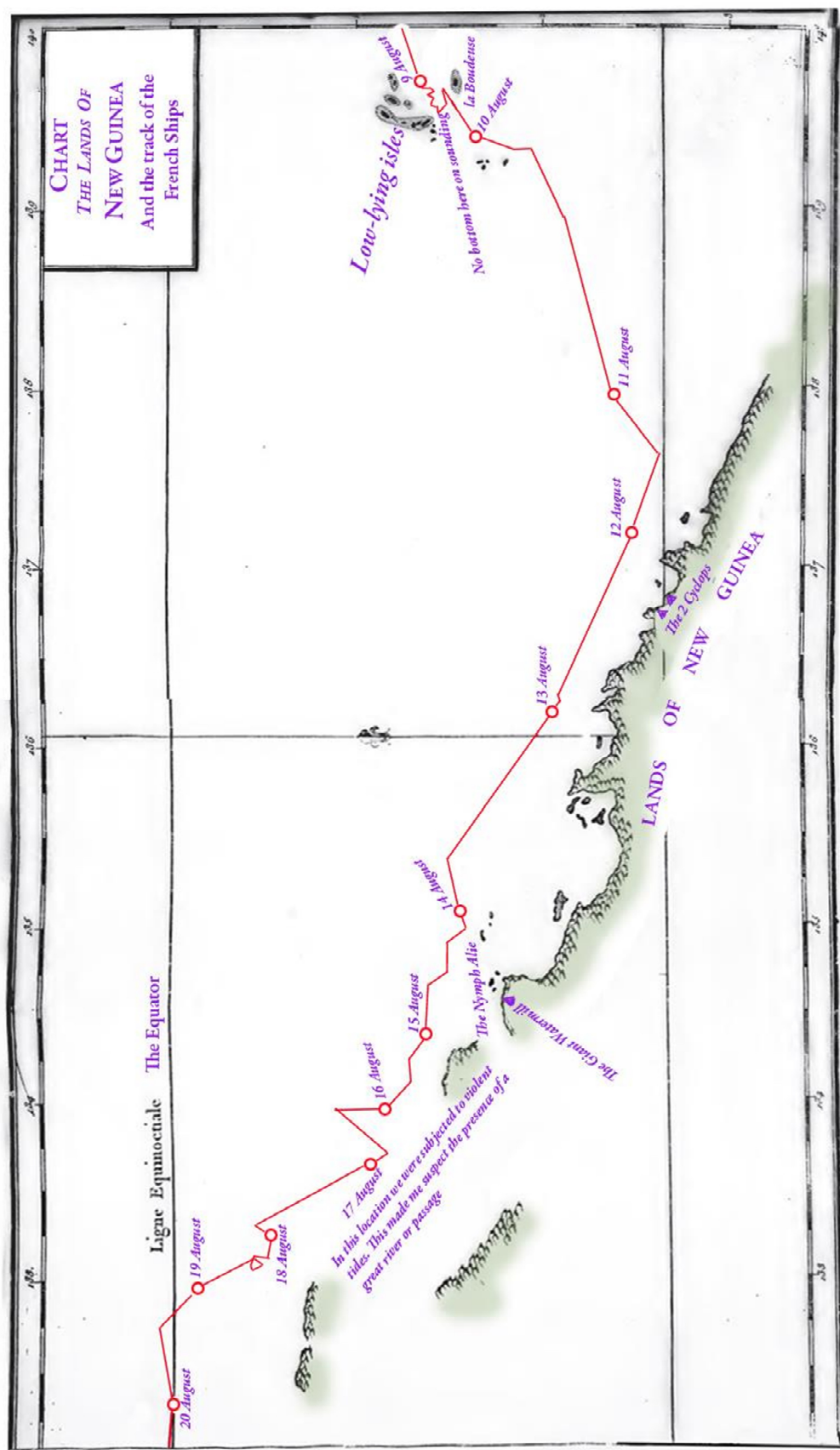
The coming of day, leaving the calm of the night almost totally undisturbed, brought hardly any increase in the wind. We were in continual dread of being cast onto this coastline by the currents. I got the anchors ready for letting-go with their cables ranged out along the deck. As it turned out this was an almost pointless precaution because every time we cast our lead we found no bottom. Such is the great danger in this region; the water within two ships lengths of these reef-bound coastlines remains too deep to for an anchor to be of any use whatsoever.

Fortunately, the fine weather held and we remained undisturbed by squalls. We were most fortunate in that, as midnight approached, a fresh breeze sprang up from the north enabling us to make some progress towards the south-east. The following day, as the sun rose in the sky, the wind freshened more and more and we were enabled to draw further away from this low-lying land.

These islands I believed to be uninhabited; at least, they were so during the time we were close enough to observe them clearly, for we could see no sign of fires, or cabins, or canoes. During the preceding night the Etoile had been even more at risk of stranding than were we for she remained a long time without steerage-way. The prevailing currents were carrying her relentlessly towards the coastline until; at last, the rising wind came to her aid. By 2 o'clock that afternoon we had rounded the most westerly of this group of islets and, having done so, we set our course to the West S West.

We sight New Guinea.

At midday on the 11th, [August] being in latitude $2^{\circ} 17'$ south we saw, to the south of us, a mountainous coastline which we considered to be that of New Guinea. Several hours later we were close enough to confirm this preliminary identification. What we could see was a land of high mountains which, in the part of the coastline off which we lay, extended away to the West N West. On the 12th at noon we had approached to within 10 leagues of that part of the coastline lying nearest to us. At this distance it was not possible to study the coastline in great detail, but, there appeared to us to be a large bay extending towards latitude $2^{\circ} 25'$ south. From the masthead we could just make out that, in the furthest reaches of the bay, the land was quite low-lying.



We were able to determine, by the speed at which we were progressing along the coast, that the currents here were in our favour, but, in order to determine exactly what contribution these currents were making to our progress over the ground it would have been necessary for us to direct our route so that we were sailing much closer in to the coastline. We continued our progress at a distance of between 10 and 12 leagues from the shore. The lay of this part of the coastline, always very mountainous, extended away towards the West N West. We noted, in particular, two very high and extremely steep mountains, towering above all the others in that range. We gave them the name, the Two Cyclops¹³⁸.

We recorded that the prevailing currents, at this point, were carrying us towards the north-west. As a consequence, the following day we found ourselves to be at a somewhat greater distance from the New Guinea coast-line, lying at this location in a westerly orientation. At dawn on the 14th we came upon two islands with an islet that appeared to be positioned between the two of them, but, somewhat further to the south of them. A line drawn through these islands, which lay at a distance of 2 leagues one from the other, would pass on a true compass bearing of East S East to West N West. These islands were of only medium height and each of them extended to no more than one and a half leagues in length.

We are affected by wind and currents.

During each of the succeeding days we made but little progress. Ever since we arrived on the coast of New Guinea we had had, almost continuously, only light breezes from the east or from the north-east. Generally the wind, that is to say what wind there was, got up between 2 and 3 o'clock each afternoon and lasted until around midnight. After this breeze declined there came a long, but, of variable length, interval with no wind at all. This calm, in its turn, was invariably followed by a breeze off the land varying between the south-west and South S West. Usually, at about noon, we were again becalmed for a further period of 2 or 3 hours.

On the morning of the 15th we once again sighted the most westerly of the two islands we had seen the previous evening. At about this same time we saw yet more land, bearing from the South E $\frac{1}{4}$ South to West S West; this had the appearance of being several low-lying islands. Beyond them, at some considerable distance, there rose the high mountains of the mainland.

The highest of these mountains, towering above its companions, was first sighted at 8 o'clock that morning bearing South S East by compass. We it gave the name "The Giant Water-Mill" (*le géant Moulineau*)¹³⁹. To the most westerly of the low-lying islands, lying to the north-west of the Giant Water-Mill, we gave the name "Alie the Nymph" (*la nymphe Alie*)¹⁴⁰. At 10 o'clock that morning we found ourselves in a tidal race of powerful currents setting rapidly toward the north and the North N East. So powerful were they that by midday we found it had become impossible to steer the ship. We were carried a great distance into the open sea, from where it was not possible to accurately determine in which direction the current was setting. The sea, in the location of this rapidly moving water, was covered with the floating tree trunks and all manner of fruits and seaweed. The sea surface was so turbulent that we became fearful lest this indicated that there was a bank in the vicinity.

¹³⁸ Now called the Pegunungan Cyclops; 2158 metres.-JFF

¹³⁹ Possibly Pegunungan Gauttier 2230 metres.-JFF

¹⁴⁰ Now called Pulau Liki.-JFF

However, the soundings we made gave us no bottom with 100 fathoms of line. This tide race caused us to consider there might be, in this locality, either the outfall of some great river from the continent or else a passage running north south and lying between two parts of the land of New Guinea.

Comparison between our observed and estimated position.

Having taken two distances between the sun and the moon with an octant, one by the Chevalier de Boucharge, the other by Mr Verron; we established our longitude at midday on the 15th as being $136^{\circ} 16' 30''$ east of Paris. The longitude, which I had estimated after having left Port Praslin, differed from this by $2^{\circ} 47'$; on this same day we observed our Southerly latitude to be $1^{\circ} 17'$.

On the 16th and 17th we experienced almost dead calm conditions; the little wind that did blow was variable. On the 16th we only saw the land once and that was at seven o'clock in the morning; even then it was only visible from the masthead. It was a land of extremely jagged and mountainous terrain. During the entirety of this day we were compelled to wait for the Etoile for she, under the influence of the prevailing current, could make no advance on the required heading, and as a consequence, we made no progress whatsoever during the course of this day. On the 17th, due to the fact that the distance between us and the Etoile had become very great, I was obliged to close with her but night was almost upon us before this could be achieved. That night was extremely stormy with torrential rain accompanied by ear-splitting thunder.

During the six succeeding days the weather continued to be totally against us. The rain was almost continuous and there were long periods of calm. What little wind there was blew directly contrary to our line of progress. It would be necessary to experience these conditions personally to gain the remotest idea of the dreadful situation in which we found ourselves.

At midday on the 17th we sighted a mountainous coastline bearing, by compass, between South S West 5° South to S West 5° West at a distance of some 16 leagues; we did not lose sight of this land until after nightfall. On the 18th, at 9 o'clock in the morning, we saw a lofty island¹⁴¹ towards the South W $\frac{1}{4}$ West at a distance of about 12 leagues. We could still see it the following morning when it bore between South S West and south-west at a distance of 15 to 20 leagues; we did not lose sight of it until noon time. The currents we had experienced during the last 3 days pushed us northwards a total of some 10 leagues but we were unable to determine the effect they had had on our longitudinal position.

We cross the equator.

On the 20th [August] we crossed the line for the second time during this voyage; the currents we were experiencing continued pushing us further away from the land. On the 20th and 21st we saw no land at all despite the fact that we had made the most practicable boards to bring us closer to it. It was however, essential to keep the land within sight and to make our way along its coastline keeping as close to it as possible in order to avoid making the dangerous navigational error of missing the entrance into the Indian Sea. Had we made this blunder the result would be to find ourselves by mischance in one of the gulfs of Gilolo.

At dawn on the 22nd we raised a coastline comprising of mountains higher than any others we had so far seen in New Guinea. We set our course to close with it and by noon we were sufficiently near to observe that it extended from the South S East 5° South towards the south-west, it appeared to

¹⁴¹ Pulau Supiori

continue in this direction on beyond our horizon. On the 23rd at midday we saw a coastline stretching away for about 20 leagues; the most westerly point of it bore almost due south-west from us at a distance of 13 or 14 leagues. Even closer to us however, there were two low-lying islands covered in trees, they were separated, one from the other, by a distance of some 4 leagues.

We make an unprofitable landing.

We approached to within half a league of these islands while waiting for the Etoile to join us. She had by this time become separated from us by a considerable distance. I dispatched the Chevalier De Suzannet, in charge of two armed boats, to investigate the more northerly of these two islands. We believed that we could see cabins there and we hoped it might be possible to trade for some refreshments. While making their approach the boats encountered a sand bank lying parallel to the coast line and running a considerable distance towards the east. As a consequence, they were forced to make a long detour in order to get round it. After having made their landing, the Chevalier De Suzannet found there were neither cabins, inhabitants or refreshments there. What we had taken, from far-off, to be for a village, was in fact no more than a cave formed by the action of the sea and a mass of rocks thrown up by the surf. Of all the trees on this island not a single one bore fruit suitable as food for men. During our time on this island we buried an inscription recording the occasion of our landing. The two boats did not get back to the ship until 10 o'clock that evening; this being shortly after the Etoile had re-joined us.

Now that we had the coastline clearly in view we were able to confirm that the currents here continue flowing in a north-westerly direction.

We continue along the coast of New Guinea.

At having got both our boats back on board we attempted to resume our course; we followed the coastline as best as we could in spite of the constant south-west and South S Westerly winds. We were obliged to make several boards in order that we should pass to windward of a large island¹⁴² that we had seen, just as the sun was setting, lying towards the west and the West $\frac{1}{4}$ N West of our position. At daybreak the following day we were surprised to find that we were still downwind of this same island.

This island's easterly coastline, which has a length of perhaps 5 leagues, runs almost exactly north-south. We could see that a small islet lay close to its most southerly point. Between this island and the coast of New Guinea, which at this location was running in a South West $\frac{1}{4}$ Westerly direction, we could distinguish a great passage¹⁴³ the opening of which was perhaps 8 leagues broad and lay in an attitude north-east and south-west. The wind was blowing from out of this passage directly toward us and the current was setting towards the north-west.

We questioned whether we would be able to make our way through this passage by tacking. I struggled on in the attempt until nine o'clock in the morning at which time I was reluctantly forced to admit the task I was engaged in was a fruitless one. I decided on a change of plan and set a course that would take us round the northerly side of the island. Unfortunately, this meant abandoning the passage for I considered it could well have been our means to escaping from the maze that was this endless chain of islands.

¹⁴² Waigeo Island

¹⁴³ The Dampier Strait (Selak Dampir)

Hidden danger.

During the course of this morning we had two alerts, one following on immediately after the other. The first of them came from the lookout at the masthead who called out that he could see a line of breakers dead ahead of us; we immediately went about. Sometime later, having had the opportunity to examine these breakers more closely, we determined that they were the result of a violent tide-race; consequently, we resumed our previous course. An hour later, the men stationed on the forecastle called out that they could see the seabed directly beneath us, our immediate alarm was great indeed but happily, it was an event as short as it was startling. We began to wonder if they had been mistaken in what they saw, that is until we heard from the *Etoile* sailing in close company with us, for she had also passed over the same shallow section of the seabed which she had seen for a period of some two minutes; it appeared to them to be a bank of coral.

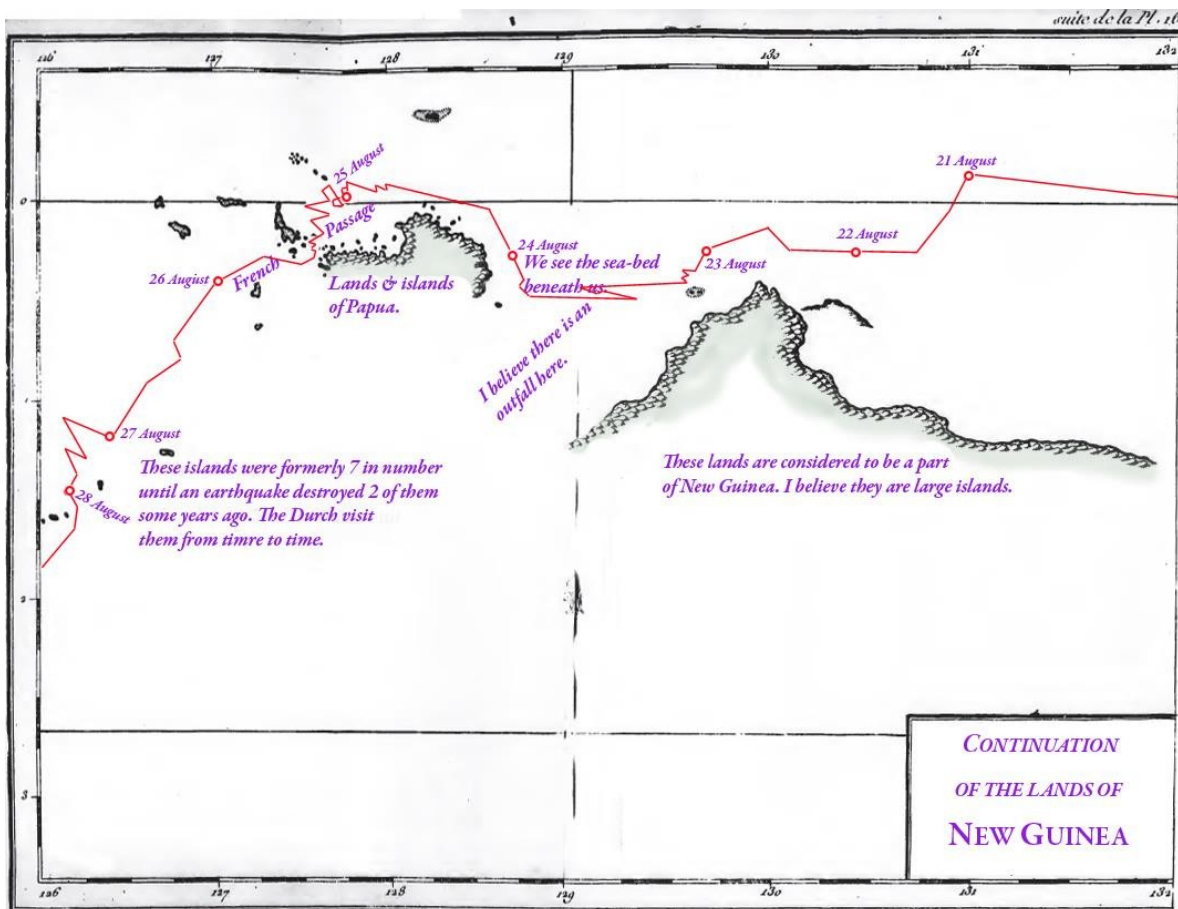
Lying on a line almost north-south from this bank, where there could easily exist places where the water is even shallower, there is a small sandy creek upon which we could see several cabins surrounded by coconut trees. This unexpected sighting, confirming that people lived here, brought home to us all, most vividly, that this was the first time we had seen any human habitation on this coastline.

At one o'clock that afternoon we rounded the north-easterly point of this great island at a distance of some 20 leagues; its coastline, at this location, ran toward the west and the West $\frac{1}{4}$ S West. In order to maintain a course that would keep us in sight of this land we were obliged to sail very close on the wind. It was not very long before we saw more islands to the west and the West $\frac{1}{4}$ N West. At sunset, that same day, another island appeared toward North E $\frac{1}{4}$ North; running from it could be seen a reef which appeared to extend as far as North $\frac{1}{4}$ N West. Thus, we found ourselves completely hemmed in yet once again.

Loss of the Senior Boatswain.

During this day our first Boatswain passed away; he had been suffering dreadfully from the effects of scurvy. His name was Denys; he was a native of St Malo and was about 50 years of age. The great majority of his life had been spent in the King's service. We all had feelings of the deepest respect for him; his experience and skills were such as to more than merit the important position he held in the ships company. All his good qualities meant that his loss was most keenly felt by everyone aboard the ship.

Forty-five other persons were also afflicted with scurvy at this time. Had it not been for the regular administration of wine and lemonade the progress of this dreadful malady would have inevitably been much more rapid.



Navigational difficulties.

We passed the night tacking to windward and on the 25th, at break of day, we found ourselves completely surrounded by land. We saw that there were 3 passages open to us: one of them opened towards the south-west, the second to the West S West and the third ran almost due east-west. However, with the wind coming from its present quarter only the last of these was a practicable proposition. It was, nevertheless, an option I had no desire to exercise; for there was no longer any doubt in my mind; we were in the middle of the islands of Papua New Guinea.

It was absolutely essential that we avoided being pushed any further to the north as this would have courted the danger, that I have previously indicated, of finding ourselves in one or other of the gulfs on the eastern coast of Gilolo. Our most pressing requirement, in order that we might escape from this dangerous region, was to make some ground towards the south. We were in a position to see that on the opposite side of the passage to the south-west of us, extending to the limits of our visibility, lay the open ocean. Consequently, I determined to beat our way through this opening. All the islands and islets by which we were surrounded, though not greatly elevated, were very steep and completely tree-covered. We could see no sign whatsoever that they might be inhabited.

We cross the equator for the fourth time.

At 11 o'clock that morning our soundings indicated a water depth of 45 fathoms and a sandy seabed; this at least was something to our benefit. At midday our observations showed us to be at 00° 5' north

latitude, hence we had just crossed the equator for the fourth time. By six o'clock that evening we were at last in a position from which we could enter into the passage to the West S West. The sum total of an entire day's struggle was a gain of only 3 leagues. The night was kinder to us; by grace of bright moonlight we were able to tack and to pick our way between the rocks and the islands. Unlike on previous occasions, when we had navigated passages with the currents opposing us, this time, as soon as we had made our way into the south-west passage, we found the current to be in our favour.

Description of the channel by which we gained the open sea.

At the end of this night [26th August] we found that the channel through which we had finally emerged had a breadth of between 2 and 3 leagues. It was limited on its western side by a great number of islands and islets, all of them quite elevated. The eastern side, which we had previously taken to be the most westerly part of the great island, turned out to be a mass of islands, islets and rocks. These, when we first sighted them, had appeared to be a single mass of land. The separations between them, that we saw each time our boards brought us into their proximity, gave us the impression of them being bays. It was not until half past four in the morning that we cleared the most southerly islets of this newly discovered passage. We gave it the name French Passage (*le passage des François*).

As we continued southwards the water depth appeared to get deeper towards the centre of the archipelago. The soundings we took gave us water depths of 55, 75 and 80 fathoms on a seabed comprising grey sand, mud and decomposed seashells. No sooner had we passed completely out of the channel than our soundings found no bottom. I set a course toward the south-west.

At daybreak on the 26th we raised a new island¹⁴⁴ bearing South S West and, shortly after that, yet another island¹⁴⁵ to the West N West of us. By noon that day the labyrinth from which we had just escaped had been left astern of us and was now no longer in sight. Our midday altitude of the sun, showed our latitude to be 00° 23' south.

We cross the equator for the fifth time.

This was the fifth time that we had crossed the line; we continued our course keeping close to the wind on the port tack, and, in the afternoon, we raised a small island toward the south-east. The following morning, at sunrise, it was 10 leagues off towards the South S East and appeared to extend some 2 leagues on a north-east and south-west axis¹⁴⁶. At 10 o'clock that morning we also saw a large steep sided mound that was of remarkable height to which we gave the name Fat Thomas¹⁴⁷ (*le gros Thomas*). At the most southerly point of this island there was a small islet and off its northerly coastline there were two more. The prevailing current no longer pushed us towards the north, on the contrary, we were now tending towards the south.

¹⁴⁴ Pulau Gebe

¹⁴⁵ Pulau Ju

¹⁴⁶ Groot-boo & Boo-eilanden

¹⁴⁷ Pulau Pisang. It is strange that Bougainville refers to Pulau Pisang as being of "remarkable height" and having islands to the North and South. It is less than 370m above sea level and there are no islands (at least there are none now). Some 60 nautical miles away is Pulau Obira at more than 1500m. I wonder if an error has occurred somewhere.

This circumstance, together with an astronomical observation which put our latitude further to the South than Cape Mabo, convinced me that we had at last entered into the archipelago of the Moluccas.

Discussion concerning Cape Mabo.

The question of which actually is Cape Mabo and where is it situated, now to mind. Some would have it that it is the cape which lies at the extreme northerly extent of the western part of New Guinea. However, Dampier has it situated it in one of the first of the Gilolo gulfs, at a latitude of 00° 30' South; while Woods Rogers positions it 8 leagues distance from the extreme end of this great island. But, the entirety of this section of the Moluccas comprises nothing more than the great mass of small islands. Indeed, it was because they were so numerous that Admiral Rogewin gave them the name The Thousand Islands (*les mille Isles*). How can it be then that Cape Mabo, in the neighbourhood of Gilolo, is a possession of New Guinea? Where should we place it then if, as we have good reason to believe, New Guinea itself is nothing more than a great mass of large islands separated by channels that have yet to be surveyed? It is my belief that it can only belong to one of the great Westerly islands.

Entrance into the Moluccas.

On the afternoon of the 27th [August] 5 or 6 islands appeared bearing, by compass, from West $\frac{1}{4}$ S West 5° South to the West N West.¹⁴⁸ During that night we held ourselves on a South S Easterly tack and, as a consequence, by the morning of the 28th these islands were no longer in sight. However, 5 other little islands could be seen and we steered towards them. By noon that day they bore between South S West 1° West and West $\frac{1}{4}$ S West 1° South from us at a distance of 2, 3, 4 and 5 leagues respectively. Fat Thomas was still visible, about 5 leagues away, to the East N East 5° North. At this same time another island¹⁴⁹ to the West S West of us, at a distance of 7 or 8 leagues, came into view. During the past 24 hours, on several occasions, we had been affected by strong tidal currents which appeared to come from the west. Nevertheless, the difference between our estimated position and that given by our noon observation was only 10 or 11 miles distant to the South W $\frac{1}{4}$ South and South West.

At nine o'clock that morning I instructed the Etoile to set up her cannons and to send one of her boats to the islands lying towards the south-west¹⁵⁰ in order to determine whether there was a suitable anchorage there and if these islands could furnish us with any productions appropriate to our requirements.

We meet a Negro.

There being hardly any wind that afternoon, the Etoile's boat did not return until nine o'clock in the evening. Landings had made on two of these islands but no trace of habitation, cultivation or the presence of edible fruit was found.

¹⁴⁸ Group comprising Pulau Weda, Pulau Damar & Pulau Djouronga.

¹⁴⁹ Pulau Tobalai

¹⁵⁰ Pulau Lawin group. These islands are the ones the Dutch refer to as "The 5 Islands" They were formerly 7, until 2 of them became submerged as the result of an earthquake.

The boat crews were preparing to depart when they were surprised to see, approaching towards them in a canoe with double outriggers and totally alone, a single Negro. In one of his ears he was wearing a golden ring and as weapons he had two short spears. Showing no sign of fear he brought his canoe alongside their boat. They asked him if he could give them anything to eat or drink; he offered them some water and a small quantity of some sort of flour, which appeared to be his normal diet. In return they made him a present of a handkerchief, a mirror and some other small trifles. On receiving these offerings he laughed as if there were no interest whatsoever to him and it appeared that he was quite familiar with Europeans. We thought that he may either be a slave who had escaped from one of the neighbouring islands under Dutch jurisdiction or that he had been sent here to catch fish. The Dutch call this group of islands "The Five Islands" and from time to time they make visits here.

The Dutch later informed us that at some time in the past there had been seven islands in this group, two of them, however, had disappeared below the sea surface following an earthquake; this being a quite frequent natural phenomenon in this region. Between these islands an extremely powerful current runs and there was no possibility of anchoring there. The trees and plants in this place are very similar to those which grow in New Britain. While we were in this location the crew captured a turtle that weighed approximately 200 pounds.

We sight Ceram.

During this time we continued to be affected by strong tidal currents setting towards the south, but, we maintained the best course possible towards Ceram. We attempted soundings on several occasions but never found bottom. Right up until the afternoon of the 30th, when we sighted a considerable landmass to the south of us, we had seen only one island. The current here was of greater assistance to us than was the wind; we approach this land during the night and on the 31st and by break of day we had approached to within 7 or 8 leagues of it. This was the Island of Ceram. Its coastline was in parts wooded whilst in others the land had been cleared for cultivation. The lie of this coastline was very nearly on a line east and west and was of an extent that the end of it was out of sight. It is a very elevated country with extremely high mountains rising in chains one after the other for as far as the eye can see.

In every sector of the island there were a great number of fires visible to us so we knew the place was densely populated. We passed that entire day and all of the following night making boards along its northern coastline with the objective of gaining ground to the west in order to reach its most westerly point. To achieve this object the current was in our favour but the negligible winds were of little use to us.

An observation on the monsoons prevailing in this region.

I have made remarks earlier concerning the contrariety of the winds that had severely retarded our progress for such a long time. In the region of the Moluccas the western monsoon is called the northern monsoon while the eastern monsoon is called the southern monsoon. The reason for this is that: when the westerly monsoon first starts to blow it generally does so from the North N West, rather than from the west; likewise, when the easterly monsoon starts it often first begins to blow from the South S East, rather than the east. These same winds predominate at the same time in both the Papua and the New Guinea regions. This was a piece of information we learned by bitter experience for it had taken us 36 days to cover a distance of only 450 leagues!

September 1768.

As dawn broke on the first day of the month of September we discovered that we had arrived at the entrance of a great bay wherein we could see smoke rising from several fires. Soon afterwards we saw

two small craft under sail; they were similar to the vessels that the Malays build. We hoisted the Dutch ensign and a pendent and fired a gun; by which action I committed a grievous error without being aware of it for we since learnt that the inhabitants of Ceram are at war with the Dutch and that they have expelled them from almost every part of the island.

We made a board into the bay in the hope of establishing contact with the natives. Unfortunately, this met with no success for as we approached their vessels set off towards the shore. We gave up the attempt and as the wind had now become fresh we took advantage of it to continue on our route. The land in the interior of the bay, while being completely surrounded by high mountains, is low-lying and mainly level. Within the bay itself there are many small islands and it was necessary for us to set a West N Westerly course so that we would be able to make our way round one of the larger of them. This island is called Borao. On the point of it we could see an islet, a sandbank and a reef which appeared to extend for a league towards the offing. Borao Island is cut into two parts by a very narrow channel. Once we had successfully rounded it we maintained a West S Westerly course until midday.

The wind then picked up and began to blow very fresh from the South S West and South S East. For the rest of that day we sailed between Borao, Kelang and Manipa, whilst all the time attempting to find a route that would enable us to pass to the south-west. At 10 o'clock that evening we saw many fires burning indicating to us that we were approaching the island of Boero¹⁵¹. As it was my intention to make a call there we passed the night standing off and on in order to try to keep up-wind whilst still remaining in sight of it.

We take precautions to ensure our security.

I was aware that the Dutch maintained an establishment here which although small was still capable of providing a good variety of refreshments in quantity. We were of course totally in ignorance of what was the political situation now prevailing in Europe. We thought it might well be counter to our best interests if we were to show our faces here without having previously clearly demonstrated that we were more powerful than were they.

The ships crews are reduced to a very sad condition.

At first light the following morning we found we had reached the entrance leading into the Gulf of Cajeli; our hearts were filled with joy in the expectation that the term of our misery might be about to come to an end for it was at this place that the Dutch maintained their establishment. By this time the scurvy was most severely affecting the crews of both ships, as it had, in fact, ever since leaving Port Praslin. There remained not a single person on board who had not been touched to some extent by this terrible scourge. At least half of the ship's company was so seriously ill that they were unable to carry out any work at all.

These past eight weeks, during which we had been continuously at sea, had cost the lives of many men and had broken the health of almost everyone. Such few victuals as did remain on board were by now utterly rotten; the very smell of them was so disgusting that at the hour when the bell announced it was time to eat these foul and unhealthy foodstuffs, we were filled with dread and loathing. How poignantly did the hopeless situation, in which we now found ourselves, contrive to make the charming aspect of the Borao coastline seem like Paradise to our eyes.

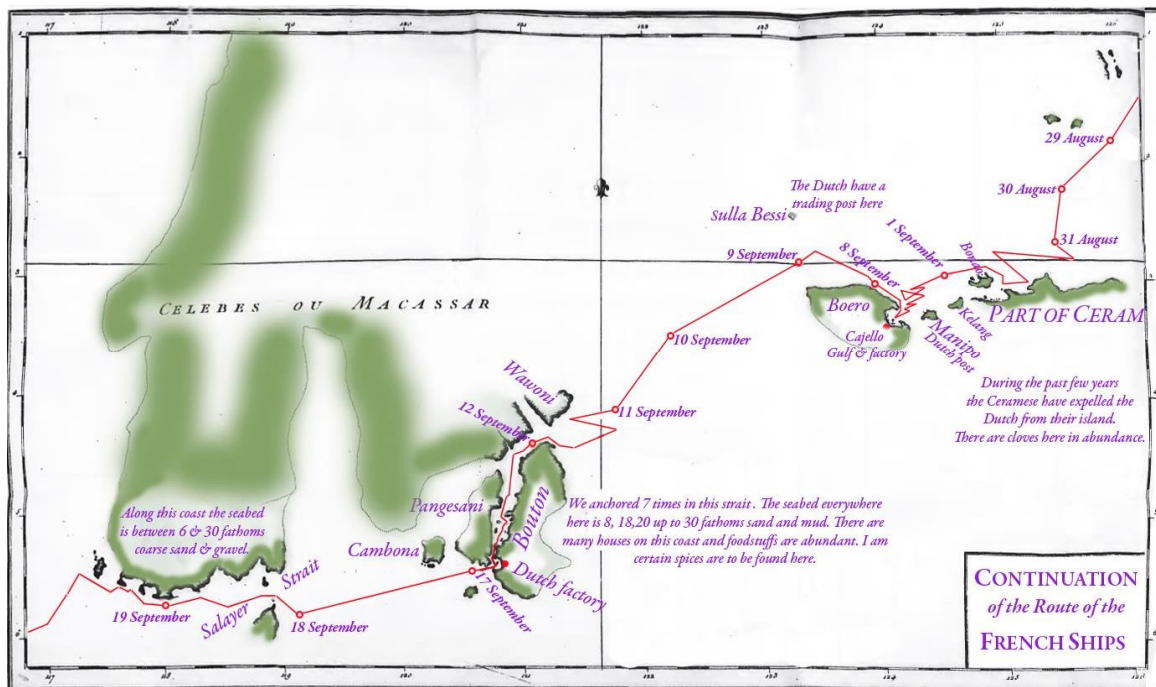
¹⁵¹ Now called Buru.- JFF

As midnight approached, wafting across the water, there came to us, even though we were still several leagues offshore, that delicious odour exhaled by the aromatic plants that grow so abundantly in the Moluccas Islands.

In our present frail condition it appeared to be the harbinger announcing the end of all the ills we had suffered over so long a period. The panorama in front of us was of a quite large town situated at the extremity of the gulf; the sight of ships lying there at anchor and the rustic scene of cattle grazing freely in the meadows around the town sent our people, myself included, into transports of delight. The intensity of the emotions that stirred us, as we gazed upon this placid scene, is almost impossible to describe.

It had been necessary for us to make several boards before we were able to enter into the gulf, the northernmost extremity of which is called Lissatetto Point and the most southerly, Rouba Point. It was 10 o'clock before we are able to set our course directly for the town. There were several craft sailing within the bay; I hoisted the Dutch flag and fired off a canon but no one made any attempt to come out to us. I dispatched one of the ships boats to take soundings ahead of us, for there is a sandbank in the proximity of the south-eastern coastline of the gulf which was a cause of concern to me.

Half an hour after noon a canoe, crewed by Indians, approached our ships. The boat's master called out to us in the Dutch language and asked who we were; however, he declined to come aboard us. Nevertheless, we continued on our course with all sails spread directing ourselves in accordance with the signals from the boat making soundings ahead of us. It was not long before we could see the sandbank; the presence of which was a danger to us in making our approach.



The rocky reef in the Gulf of Cajeli.

At the time we made our entrance it was low-water and the danger was very real to us. The reef there comprises a chain of rocks mixed with coral which, from the south-easterly coast of the Gulf and for about a league inside Rouba Point, extends to the south-east and to the north-west for half a league. At a distance of some four boats lengths from its extremity, the water depth is 5 or 6 fathoms on a coral bed unsuitable for anchoring. Immediately after the reef has been passed the water depth increases to 17 fathoms on a bed of sand and mud; we made our course almost exactly south-west. Between 10 o'clock and half past one we had covered the 3 leagues to our anchorage and we moored exactly opposite the main building.

Adjacent to this building, several small Dutch style houses had been constructed at a distance of at least a quarter of a league from the shore. Our Anchorage was in 27 fathoms water on a sea bed of sand and mud; we took and recorded the following bearings:

Lissatetto Point - to the North 4° East, distance 2 leagues.

Rouba Point - to the N East 2° East, distance $\frac{1}{2}$ league.

A peninsula – West $\frac{1}{4}$ N West 1° West, distance $\frac{3}{4}$ league.

The point of a reef that runs parallel to the peninsular and $\frac{1}{2}$ leagues to the offing –North West $\frac{1}{4}$ West.

The flagpole on the principal Dutch building – South $\frac{1}{4}$ S West 5° West.

The Etoile moored close to us, but somewhat further to the West N West.

We put in at Boero.

Moments after we had anchored two unarmed Dutch soldiers, one of whom spoke French, came aboard and asked me on behalf of the Resident Controller why, when it had been widely promulgated that entry here was only permitted to vessels of the Dutch East India Company, we had made a call at this port. I sent an officer ashore with them in order to explain that our urgent need for provisions had forced us to enter the first port we came across. This officer was instructed to tell the Resident **Governor** that our distressed condition had obliged us to ignore the interdiction applying to foreigners in the ports of the Malacca Islands and that we would leave just as soon as we had obtained the refreshments of which we were in such desperate need.

Embarrassing situation in which the Resident Governor finds himself.

Sometime later the two soldiers returned and handed me an order, signed by the resident Governor of Boero, who was named Mr Amboine. It stated that the governor was expressly forbidden to receive any foreign ships in his port; further, he required me to explain in writing the reasons why we had to come here. I considered that his request was justified and I satisfied it in giving him a signed disposition stating that we had left the Falkland Islands bound for India, via the South Pacific Ocean. I explained that the monsoon had been against us and we were thus desperately short of provisions due to our failure to arrive in the Philippines and were compelled to put in at the first port we came to in the Moluccas in order to obtain help. We were so desperately in need that I was requesting him, in the name of that most respectable of all motives, humanity, to give us what assistance he was able.

We receive a friendly reception.

From that moment on there were no further difficulties; the Resident Governor, having done his duty as far as his company was concerned, treated us with magnanimity. With a good heart he offered us whatever he had available; he did so in the same spirit of being the master in his own house. Just before five o'clock I went ashore with several other officers to pay him a visit and, despite the inconvenience our visit must have caused him, he received us with great kindness. He even invited us to supper that evening; an offer we were of course honoured to accept. The obvious pleasure his meal gave us; the avidity with which we consumed it; brought home to him, far more clearly than words ever could have done, that it was not without good reason we claimed to be starving!

All the Dutchmen present were in a state of high excitement; they were very reluctant to eat anything for fear that there would not be enough food to serve our ravenous appetites. It is necessary to have been a sailor, and, to have been deprived to the extent that we had been during the past several months, to fully appreciate the sensation the sight the salads and the excellent supper he laid out for us had upon us in our pitiful state of near starvation.

The supper we ate that evening was, for me at least, one of the most memorable and glorious episodes in our entire voyage. It was doubly so because I had been able to send on board such an abundance of foodstuffs that the crews of both the ships ate a supper which, that night, was equally as fine as the one we ourselves had eaten.

Every day, during the time we spent here, we were provided with fresh venison for all the ships company. When finally we prepared to make our departure we were given 18 steers, several sheep and damned near as much poultry as we could wish for. It was, however, necessary to substitute our daily bread for rice; this being the staple food of the Dutch in this part of the world. The local people here eat a sort of bread manufactured from sago and it has an appearance similar to cassava. They obtain it from the innermost part of the sago palm, from which its name is derived. We were, however, unable to obtain the quantity of green vegetables we required and which would have been so beneficial for our health. This was solely because the local people here do not cultivate it. Nevertheless, the governor kindly and generously provided whatever he could from the company's own gardens, a donation greatly to the benefit of those amongst us who were still sick.

The Company's policy.

Everything in this place belongs to the company directly or indirectly including all manner of livestock, seeds and foodstuffs of every type. The Company, and the Company alone, is permitted to trade. Although it is true that the local people did sell us poultry, goats, fish, eggs and several types of fruit. The money they took by these sales did not stay in their pockets long. The Dutch are masters at extracting money from them; they sell them coarse, simply made clothing at an extortionate price. Even deer hunting is permitted to the local people only on payment of a fee; pursuit of game being, generally, a privilege only enjoyed by the Dutch. Each native hunter, who has been so authorised, is given three charges of gunpowder and shot, in return for which he must produce two animals for each of which he is paid 6 sols. Should they return with only one animal, the price of the powder and shot they have used is deducted from the money they receive for the meat.

On the morning of the 3rd [September] we sent all the sick members of the crews ashore for the duration of our stay, additionally, every day we sent a large number of the ship's companies onshore for exercise and relaxation.

We used local slaves, hired on a daily basis from the Resident Manager, for the work of watering the ships and transporting goods and personnel to and from the shore. The Etoile took the opportunity, while we were here, to obtain new main-mast head-caps; her's being so badly worn and having so much play in them that they had become dangerous.

When we first moored here we had set both our bower anchors. The Dutch however, informed us that the holding ground was excellent and that both the offshore and onshore breezes were regular and predictable. Hence, we recovered one of our anchors and lay, as did all the Dutch ships, to a single cable.

During the time spent here we had the most excellent weather imaginable. Even at the hottest part of the day the temperature never rose above 23°. During the daytime there were breezes from the north-east and the south-east which, as evening approached, shifted round and began to blow from off-shore. The effect of this was to make the night-time temperature cool and refreshing.

We were given the opportunity to discover something of the interior of the island, we having been permitted, on several occasions, to do a little deer hunting. This sport is carried out here using beaters and it proved to be a most pleasurable activity and we all enjoyed it immensely. The countryside in the interior is very beautiful. Plains are interspersed with stands of timber; there are low hills with valleys in between that are watered by sparkling streams of crystal-clear water. The flesh of the local deer makes the most delicious eating; it was the Dutch themselves who first brought them to this place where they have multiplied prodigiously. There are, additionally, a great number of wild boar here and several species of feathered game.

Details concerning the Island of Boero.

The Island of Boero has an east to west length of some 18 leagues and its breadth, from north to south, is 13 leagues. Previously the island had belonged to the king of Ternate to whom an annual tribute was paid. The main small town is called Cajeli (Cajelli on the maps) which is situated in a marshy area extending for some 4 miles between the rivers Soweill and Abbo, within the Gulf of that same name. The last of these two rivers is the largest on the island and at all times its waters are extremely turbulent making landing difficult at all times, but, particularly so at low water. When the tide is out it is necessary for boats to stand off from the beach a great distance.

The principal Dutch building and the 14 houses for the local people, are now all grouped together and comprise the main settlement, in former times they been dispersed at various locations around the island. When the Dutch first came here they built a stone fort which unfortunately blew up in 1689; since then they have contented themselves with defences of a not very robust nature. These comprise no more than a wooden palisade wall equipped with several small calibre cannon set up to form the most efficient battery possible.

This place has been given the name The Fort of the Defence. A name which, to my mind, can only applied to it in a somewhat tongue in cheek fashion. The garrison, which is under the orders of the Governor, comprises a sergeant and 25 men; in the entire island there are no more than 50 white men in residence.

Around about the island there are several locations where groups of Negroes cultivate rice. During the time that we were here the number of Dutch people was augmented by the arrival of three ships; the largest of these, the *Draak*, was a 14 gun snow commanded by a Saxon going by the name of *Kop de la Clerc*, she had a crew of 50 Europeans. These ships had been sent to cruise amongst the islands of

Papua New Guinea and the Moluccas for the purpose of keeping the inhabitants of these islands under Dutch subjugation.

Concerning the indigents of this island.

The people who live here are divided into two groups: the Moors and the Alsouriens. The first of these two groups is totally under the control of the Dutch who have instilled into them an almost paranoid fear of strangers. They observe the Mohammedan faith rigorously; that is to say, they bathe their bodies regularly, never eat pork and take as many wives as they can support. These wives which they guard jealously are kept in perpetual confinement. Their staple foodstuffs are: sago, fruit and fish. On feast days they eat great quantities of rice which is sold to them by the Company. The Chiefs; whom they refer to as *Orencaics*, have a close relationship with the governor who, through their mediation, keep the local population under his control. The Company has created amongst these Chiefs and the local population a web of jealousy and suspicion that ensures the entire population is reduced to and is held in a state of slavery. This is the same political philosophy that the Dutch have adopted in all the places they occupy in this region. Should a particular chief plot against his Dutch masters some other chief, on hearing of it and seeking to raise himself in the estimation of the Dutch, would immediately report the situation to them.

In addition to their total lack of loyalty to one another these Moors are ugly, lazy and make indifferent warriors. They live in dread of the Papuans who come from time to time in bands of 200 or 300 to burn their villages and kidnap as many people as possible to be made their slaves. The most recent raid, which was three years ago, still remains the main subject of conversation. The Dutch, themselves, do not use the people of Boero as slaves. Such slaves as they do require they obtain from the Celebes or from Ceram; the natives of these two places, as a matter of course, reciprocally sell into slavery the inhabitants of the other.

The wise people.

The Alsouriens are a free people who do not oppose Dutch dominance and are satisfied to be left to their own devices. They have no interest in possessing trinkets or any of the goods from the civilized world that are offered to them by Europeans in exchange for their liberty. Their habitations are widely dispersed principally amongst the mountainous and inaccessible regions of the island. Their principal food is also sago, fruit and what meat they can obtain by hunting. It is not known what religion they follow, but, they are certainly not Mohammedans for they raise pigs and they eat pork. From time to time the Chiefs of these Alsouriens pay visits to the local governor. They would be acting with greater wisdom if they stayed at home!

Productions at Boero.

I have no knowledge that there were ever spice plantations on this island and even if there were, they certainly no longer exist. Originally, the commercial reason for the Dutch coming here was to obtain black and white ebony timber and other species of much sought after exotic hardwood which they use for cabinetmaking. There is also here a very beautiful pepper-tree plantation; its existence on the island confirmed to us that the pepper-tree is indigenous to New Britain. What little fruit is grown here includes: coconuts, bananas, grapefruit, lemons, limes, Seville oranges and a few pineapples.

They also grow an extremely good variety of oats, which they call *ottong* and, of course, Borneo sago is produced from which they make a sort of stew. This, in our opinion, had the most detestable taste imaginable.

The forest here is inhabited by a great number of bird species, their plumage is frequently extremely beautiful and the air here teems with vast flocks of these gorgeous fowl. Amongst the many birds that exhibit fine plumage, one of the most remarkable is the budgerigar.

Amongst the animals to be found here there is: a species of wild cat that carries its kittens in a pocket situated in the lower part of its abdomen, a bat with an exceedingly large wingspan, enormous snakes that are capable of swallowing an entire sheep, and a species of snake, a 100 times more dangerous than the one previously mentioned, which inhabits the trees and spits out a venom, for which there is no known antidote, into the eyes of anyone who should look up into the canopy.

While we were out deer hunting we killed several of this evil species of reptile. The banks of the river Abbo are almost everywhere densely tree-covered and are infested with enormous crocodiles; these powerful reptiles take as their prey both men and beasts. It is during the night that they are most active and they have been known to drag men from their canoes and into the water. As a means of preventing the approach of these creatures the local population resorts to carrying blazing torches when they go abroad during the hours of darkness.

The coastal region of Borao is not abundantly supplied with beautiful seashells. Ornamental molluscs, an important item of trade to the Dutch, are obtained from the coastline of Ceram, Amblaw and Banda and from these places they are exported into Batavia. It is also at Amblaw that the most beautiful of the cockatoos are to be found.

Generous action of the governor on our behalf.

Henry Ouman, the resident manager of Boero, presides here as if he were a king. In his mansion he has 100 slaves to service his household and fulfil his slightest whim. He has at his disposal everything necessary and agreeable to support his luxurious lifestyle. His title is Under Merchant; a position that is third in rank in the company's hierarchy. He was born in Batavia where he married a Creole from Amboine. I can find no words that would praise highly enough the kind and generous manner in which he treated us while we were there. Without a doubt our arrival in Boero was an acute embarrassment to him. Nevertheless, having set himself to rights with his own company, he at all times treated and supported us in the noblest spirit of true friendship. He displayed, in fact could not prevent himself displaying, his true personality and this was that of a frank and generous human being. His house was our house. At any hour of the day we were made welcome and provided with food and drink. This, of course, was a situation particularly delightful to us in view of the period of famine through which we had so recently been obliged to pass. He put on ceremonial dinners for us, of which the richness, elegance and good cheer; particularly when one considers the smallness and remoteness of the island came as a considerable, but, extremely pleasant surprise to us.

The house where this honest Dutchman lived was quite delightful. It was elegantly and beautifully furnished completely in the Chinese style. The house had been designed with a single end in view; to provide a cool and refreshing environment. All around the house gardens had been laid out through which there meanders a pleasant river. To arrive at the house from the seashore one passes along an avenue of lofty trees.

His wife and his daughters, all dressed in the Chinese style, discharged their duties as hostesses in the most charming manner. They spend their leisure hours in: preparing flowers for distillation into

perfume, in manufacturing floral ornaments and in the preparation of betel-nut for consumption. The very air we breathed in this wonderful house was deliciously perfumed. How great is the contrast between the sweet and tranquil existence that they enjoy when it is compared with the deprived and unhealthy existence we had suffered during the preceding six months?

Aotourou's conduct.

It is necessary for me to mention a few words concerning what was Aotourou's impression, when he first saw this European establishment. We had, of course, anticipated he would be greatly surprised when he saw men dressed in the same manner as us; houses, gardens and the variety and great number of domestic animals. He found it impossible to stop staring at all these objects so completely new to him. He was especially appreciative, in a frank and inclusive manner, of all the hospitality shown towards him. As he had not been present when accounts were settled, he was of the belief that all the things we received were given freely and that we paid for nothing. As a consequence his comportment towards the Dutchmen was spirited and relaxed. He began by telling them that he was the chief in his own country and was travelling for pleasure with his friends. When he dined with us he studied the actions and behaviour of the Europeans carefully and was at pains to imitate them as exactly as he could.

He had not accompanied us when we made our first visit and he somehow had got it into his head that, strange as it may seem, the reason for this was because he was knock-kneed! He was absolutely serious when he requested some of the sailors stand on his legs in order to straighten them. He asked us many times if Paris was as beautiful as this place.

We obtain victuals of excellent quality.

By the afternoon of the 6th we had embarked rice, cattle and many other sorts of provisions. Having settled our accounts, we retained a particular fond memory of the good Resident Manager; it was, however, a very expensively bought one! But, we were assured that what we were charged was in accordance with the tariff laid down in the Company rules and that it was absolutely non-negotiable. It must also be admitted that the goods we bought here were of excellent quality. The beef and the mutton, in particular, were far superior in quality than any other I have obtained in any country within the tropics. The poultry we purchased was particularly delicious. The butter that is manufactured in Boero is considered by the people who live here to be of very high quality. This proudly boasted claim was, however, considered to be, by the Breton members of our crews, a reputation acquired on somewhat shaky foundations!

On the morning of the 7th [September] we re-embarked the sick members of the crews and passed the day in making preparation to sail that same evening with the offshore breeze. The good food that had been consumed, combined with the healthy air at Boero, had considerably improved the condition of those in the crew suffering from scurvy. The period we had passed on shore, although it was of no more than of six days duration, set them well on the road to making a full recovery now they were back on board. At least, with the excellent provisions we were now in a position to feed them, they would certainly not get any worse.

Observations concerning the monsoons and the ocean currents.

There is no doubt that it would have been of great value to our people, the sick ones in particular, had we been able to considerably extend the time spent at this port. Unfortunately, the impending cessation of the easterly monsoon made it essential that we depart for Batavia without further delay. Once the direction of the monsoon changed, it would be impossible for us to get there because then, in addition to struggling against the opposing wind, we would have the currents to contend with.

In this region the tidal stream changes as the monsoon does, slavishly imitating its direction.

Although, for almost a month after the monsoon changes, which is normally in October, the currents continue in the direction of the preceding one; nevertheless, the change can be as much as a month in advance of or in retard of this date. September is usually a month of light winds and, as a general rule, the months of October and November are even less windy.

This is the season of calms and it is the time chosen by the Governor of Amboine to make a tour of the islands dependent on his government. June, July and August being months of almost continual heavy rain. The easterly monsoon, to the north of Ceram and Boero, blows from South S East to South S West; whilst in the islands of Amboine and Banda it is from the east or the south-east. The westerly monsoon blows from West S West to North West. During the month of April the wind normally blows from the West. The stormy character of these winds is of an ill-repute equal to the bad reputation the easterly winds have gained for being rainy.

Captain Clerke told us that he had sailed off Amboine, during the entire month of July, while attempting, without success, to make an entrance there. During this time they had been subjected to continuously torrential rain that had caused great sickness amongst his crew. It was at exactly this same time when we ourselves had received such a soaking in Port Praslin.

Observations concerning earthquakes.

During the course of this year there had been three earthquakes at Boero, one following on after the other in quick succession. The first occurred on 7 June the others on the 12th and the 27th of July and it was on the 22nd of this same month that we felt the effects of one while we were in New Britain.

The earthquakes in this part of the world are of terrible consequence for navigators. Sometimes they completely expunge entire islands and sandbanks whose positions were previously known and had been marked on our charts. On other occasions, completely new features are created in places where hitherto navigation had been unobstructed. From such gains as these no benefit accrues to the seaman and voyages would, of course, be undertaken in considerably greater safety if things could remain exactly as they had ever been.

We leave Boero.

By noon on the 7th [September] all our equipment had been embarked and all we were now waiting for, before we were ready to sail, was for the breeze to start blowing from off the shore. We did not begin feel this much waited for wind until eight o'clock that evening. I immediately sent one of our boats, mounting a lantern, with instructions to moor at the point of the bank lying on the eastern side of the south-eastern coast whilst we were making our final preparations to departure.

We had certainly not been misled when we had been informed how good the holding ground was at this mooring. We, unavailingly, expended a great deal of time and effort at the capstan only to have

the messenger part.¹⁵² So great was the grip of the glutinous ooze into which it had become embedded that it was not until we had resorted to the use of a heavy tackle and a hawser that we succeeded in breaking out our anchor and it was 11 o'clock that evening when we finally got under sail. Once we had rounded the point of the sandbank we embarked our boats, the Etoile did the same, and we set our course successively north-east, North E ¼ North and North N East, in order to make our way out of the Gulf of Cajeli.

Astronomical observations.

During the time we had spent here Mr Verron had made several on-board observations of distance. The average results of these had enabled him to determine that the longitude of this gulf was 2° 53' further to the West¹⁵³ than we had estimated it to be, based on the longitude we had previously calculated while we were in New Britain.

It is worth my making the observation at this point that in the Moluccas, although they quite reasonably employ the same date as in Europe; we, by virtue of the fact that we had made a complete circumnavigation of the globe, had lost a complete day.

Nevertheless, I continued to employ our original method of recording the date in the log until we reached Mauritius (*l'Ile de France*) with a notation clarifying that when I wrote "Wednesday the 7th", the date in India was in fact Thursday the 8th.

¹⁵² Messenger or voyal was formerly an endless, heavy rope used to recover an anchor by capstan.-JFF

¹⁵³ That is about 36 nautical miles.-JFF

CHAPTER VII

Our passage from Boero to Batavia.

September 1768.

Difficulties we experience whilst navigating amongst the Moluccas islands.

Although I firmly believe that the Dutch have done their utmost to spread the notion that navigation in this region is far more difficult than, in fact, it really is. I am equally well aware that this is a location where reefs and other difficulties abound. The greatest inconvenience to us was the absence of accurate charts. The French charts for this part of the East Indies are more likely to cause ships to be lost than they are to guide them safely through!

In my discussions with the Dutch at Boreo I had been able to obtain nothing more than vague information concerning the geography here. When we arrived there the *Draak* had been preparing to sail within a few days in order to transport an engineer to Maccassar. It was my intention to follow her there and to use her as my guide. Unfortunately, the resident manager instructed the captain of this ship to remain at Cajeli until after we had departed. As a consequence we were compelled to sail alone and I so directed my route in order to pass to the north of Boreo and, thus, to try to locate the Straits of Bouton, which the Dutch have named *Bouton's Straat*.

The route we follow.

We ran along the coastline of Boreo for a distance of about a league and a half, and, up until midday, we did not notice any appreciable effect the currents were having on our progress. During the morning of the 8th we raised the islands of Kilang and Manipa. Once the low-lying land, that is to be found as one makes one's exit from the Gulf of Cajeli, has been passed, the coastline becomes very mountainous and runs towards the West N West and the West $\frac{1}{4}$ N West.

On the morning of the 9th we sighted the small island of Xullabessie¹⁵⁴ where the Dutch maintain a fortified establishment called *Claverblad*, which in English means "The Clover-leaf". The garrison there comprises: a sergeant and 25 soldiers under the orders of Mr Arnoldous Holtman who, in reality, is no more than a book-keeper.

This island was formerly a dependency of the government of Amboine, now; however, it is administered by the government of Ternate. During the time that we sailed along the coastline of Boreo we experienced only light winds and we were sheltered, to some extent, from what little breeze there was; it was almost as if we were within the confines of a bay. The currents during these two past days carried us almost 8 leagues to the west. We were able to evaluate with considerable accuracy the effect that the current was having upon us by taking frequent bearings. During the last day we were also carried somewhat towards the south; an effect that was verified when we observed the sun's meridian altitude on the 10th.

At sunset on the 9th we had our last sight of Boreo and, now that we were in more open water, we found the wind to be quite fresh and blowing from the south and from the South S East. At this time we were subjected to some quite significant tidal races. Whenever the wind so permitted I held to a

¹⁵⁴ Now Pulau Sulabes, referred to as Sulla Bessie on Bougainville's chart.-JFF

south-easterly course in order to make a landfall between Wawoni and Bouton. It was my intention to take our passage through the Bouton Strait. It is claimed that at this time of the year it is dangerous to pass to the east of Bouton and that one runs a real risk of being pushed onto the coastline by the currents and wind. It is therefore considered essential, in order to avoid this possibility, that one waits until the westerly monsoon has firmly established itself.

Nautical advice.

The above advice was given to me by a Dutchman, however, I am not in a position to confirm how true it is; but, I what can confirm from my own experience is that one may choose to pass either to the north or to the south of the reef called Toukangbesi¹⁵⁵ (*Toukanbessie*) But, the passage through the Strait of Bouton is eminently preferable to either of these options. All the other possible routes are strewn with many of the visible and hidden dangers that are so held in dread; even by navigators familiar with the location.

On the morning of the 10th one of the crew, a tailor by profession, whose name was Julien Launai, died as a result of being stricken by scurvy. He had for a while started to make a recovery from this illness, but unfortunately, his frequent bouts of heavy brandy drinking finished him off!

We sight the Strait of Bouton.

At eight o'clock in the morning on the 11th [Sept.1768] we sighted land bearing from West $\frac{1}{4}$ S West to South W $\frac{1}{4}$ South 5° West. By 9 o'clock we had recognized it as being the island of Wawoni;¹⁵⁶ the central part of this island, in particular, is very mountainous. By 11 o'clock we had identified the northern coastline of Bouton¹⁵⁷ and at midday we fixed our latitude by observation as being 04° 06' south. The most northerly point of the island of Wawoni was bearing West 5° North, its most westerly part was bearing South W $\frac{1}{4}$ West 4° South, at a distance of about 9 leagues.

During the afternoon we ran on until we were within 2 leagues of Wawoni, we then headed out into more open water. During that night we made boards so that, by dawn the following morning, we had positioned ourselves to the windward of the entrances into the Strait of Bouton. It so turned out, however, that at six o'clock on the morning of the 12th [September] the entrance was bearing between North W $\frac{1}{4}$ West and West N West and I set our heading towards the northerly point of Bouton. At this same time we lowered our boats into the water and towed them astern of us. At nine o'clock that morning, with the aid of a goodly breeze, we entered into the Strait of Bouton. The wind had died away by half past ten, but, by midday it had picked up once again.

Description of our entrance.

It is of practical advantage, when entering this strait, to keep close in to the shore of Bouton itself. The most northerly point is of medium height and is divided up into a series of low-lying hills. The cape that forms the point of the entrance was on our port side and comprises steep cliffs in front of which there stands, projecting above sea level for a considerable distance, a number of white rocks.

¹⁵⁵ The Tukangbesi Islands, of which the largest is Pulau Wangiwangi, lie immediately East of Buton Island.-JFF

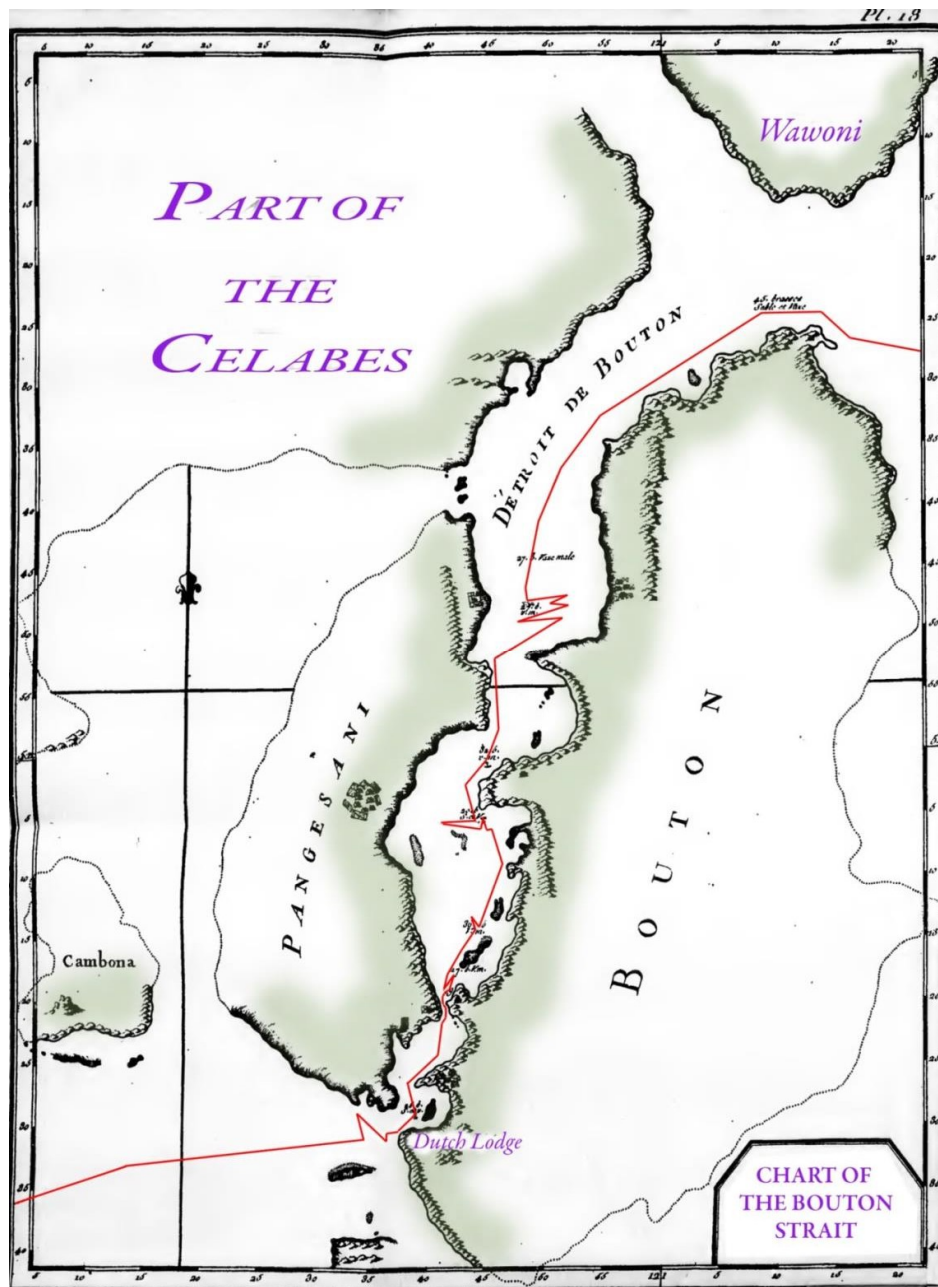
¹⁵⁶ Pulau Wowoni.-JFF

¹⁵⁷ Pulau Butung.-JFF

To the west of this cape there is a fine bay in which we could see a small craft under sail. The point opposite, that is to say on Wawoni side, stretches away towards the west is low-lying and quite level. From our position the mainland of the Celebes lay in front of us and we could see a passage open towards the north between this large island and Wawoni. This, in fact, is a false passage for the true route lies further toward the south. From our present position the true channel appeared to be almost closed off.

In the distance we could see some low-lying land which appeared to be a chain of islands.

As one enters the true channel along the coastline of Bouton Island one can see several large, rounded capes and a number of attractive looking coves. On the seaward side of one of these capes stands two large rocks; at first glance they could easily be mistaken for two ships under sail; one of them large and the other small.



About a league to the east of these rocks, at a distance of a quarter of a league from the coastline, our soundings showed a water depth of 45 fathoms with a seabed of sand and mud. From the entrance the strait lies, first, towards the south-west, after which it turns towards the south.

Our noontime observation put our latitude as 4° 29' south, at which time we were a little beyond the two rocks mentioned above. These rocks are on the seaward side of an islet and beyond there is a fine bay within which we could see a small vessel. It had the shape of a square chest and was moving close to the shore; it was being propelled by oars, but, it also had a sail deployed and was towing a canoe.

We had on board a French sailor who had embarked at Boero. Prior to joining us he had sailed in Dutch ships in the Moluccas area for the previous 4 years. He told us that this craft was a local privateer in search of prisoners for sale into slavery. The arrival of our ships appeared to cause her crew considerable concern for they immediately took in their sail and with the aid of long bamboo poles punted themselves into a position between the shore and the islet.

As we continued our way through the strait the wind changed direction so that it corresponded with that of the channel and thus we were able to come round by degrees onto a heading of south-west by south.

Appearance of the countryside.

Towards two o'clock in the afternoon it appeared to us that the direction of the tide had changed and was now opposing us; we could see that the waves were now washing against the trees bordering the coastline, proving to us that the flood tide comes from the north; at least, it does so at this time of the year. At half past two that afternoon we sailed past a superb port in the coastline on the Celebes side. The view this land presents is a most charming panorama of low-lying land, small hills and mountains. The fresh greenness of the vegetation considerably enhanced the beauty of this lovely landscape, thus clearly indicating the soil to be rich and productive.

Soon afterwards the island of Pangesani¹⁵⁸ and several smaller islets to the north of it revealed themselves. They were clearly detached from the coastline for we could see that a channel existed between each of them and the mainland. To the north, the lofty mountains of the Celebes stood out towering above the foothills in the foreground. The Strait of Bouton is, in fact, that strip of water which is formed by Bouton itself and the long island of Pangesani. By half past five that afternoon we were completely enclosed within the strait itself and were unable to see either its entrance or its exit. The soundings we took gave us a water depth of 27 fathoms on an excellent holding ground of mud.

The first anchorage.

The breeze, now blowing from East S East, obliged us to sail close on the wind in order to keep us in close to the Bouton coastline. By half past six the wind had died away to almost nothing and the current continued to be in opposition. We anchored in midstream with a single kedge-anchor in 27 fathoms on a bottom of soft mud. To us this indicated that the water depth in this section of the strait to be fairly constant.

The breadth of the strait, from its entrance to our first anchorage, varied between 7, 8, 9 to as much as 10 miles. The night that we spend in this anchorage was exceedingly fine. On the Island of Bouton

¹⁵⁸ Pulau Muna

several fires could be seen; we considered, therefore, there must be houses there. We thought however, that the Island of Pangesani must be much more densely populated as a great number of fires could be seen blazing in every part of it. Pangesani is a low-lying, very undulating island and is covered with beautiful trees. It would come as no surprise to me to discover that spices were growing there. On the morning of the 13th a great number of canoes with outriggers appeared around the ships.

Trading with the local people.

The aborigines brought poultry, eggs, bananas, parrots and cockatoos out to us. They asked us for Dutch coinage in exchange; they particular wanted those pieces of silver valued at 2½ sols. They were also very happy to take the red handled knives we offered them. The people here are part of a widely distributed race that live in the hilly region of Bouton lying directly opposite our anchorage where their houses occupied five or six of the peaks. The ground everywhere there had been cleared of trees and scrub and divided up into cultivated plots separated, one from the other, by irrigation ditches. Some of the houses here are gathered together into villages while some others have been constructed in the fields where they are encircled by hedges. The people here cultivate rice, maize, potatoes, yams and other root vegetables. At no other place had we ever tasted bananas that were as delicious as the ones we found here. They also have, and in great abundance; coconuts, lemons, mangrove apples¹⁵⁹ and pineapples. All the people here are darkly tanned by the sun are of short stature and are extremely ugly. Their language is Malayan; the same as that spoken by the people in the Moluccas. Their religion is that of Mohamed.

These people are extremely good businessmen, nevertheless, they invariably act in good faith and trade honestly. They offered to sell us some coloured cotton cloth which was of very coarse composition; I showed them some samples of cloves and nutmeg and asked them if they were able to supply them. They told me that they had some in their houses that had been dried and that, whenever they required more, they fetched it from the Ceram and the Banda region. They made it quite clear to us that these spices were not supplied by the Dutch. They informed me, however, that a large Dutch company ship had passed through the strait about 10 days previously.

From the time the sun rose we had only light, variable and contrary winds blowing from between south and south-west. We got underway at half past ten with the first of the flood; we made many boards but covered hardly any ground. At four o'clock that afternoon we entered into a passage no more than 4 miles wide. This narrow part of the strait is formed, on the Bouton side, by a low-lying point which is a sort of promontory. To the north of spit there is a great bay wherein three islands are to be seen. On the Pangesani side of the channel, this narrowing is caused by the presence of seven or eight small wooded islets, none of them more than a quarter of a league across. On one of our boards we approach one of them within pistol shot and, though we were extremely close to it, our soundings with 15 fathoms of the line found no bottom.

In the main part of the channel we had taken soundings 35, 30 and 27 fathoms on a bottom of mud. Our course had taken us to the outside, which is to say to the west, of the 3 islets situated off the Bouton coastline. These islands were of considerable size and were densely populated.

¹⁵⁹ Probably *Sonneratia alba*. -JFF

Our second anchorage.

The coastline of Pangesani comprises an elevated terrain in the form of an amphitheatre. Between it and the sea there is a low-lying strip of land which, or so I believe, frequently becomes inundated. Consequently, I concluded that the people here have their houses situated amongst the tops of the mountains. Perhaps also, since they are in a state of continuous war with their neighbours, it is their strategy to have a strip of wooded land between them and potential enemies. Any attackers would, of course, thus be forced to climb the slopes below their villages in order to approach them. It appears that they are even fearful of the inhabitants of Bouton in whom they have so little faith that they treat them as pirates. Both these groups of people never go about without weapons; in their belt they always carry their kriss, their traditional and formidable wavy bladed dagger.

At eight o'clock that evening, the wind stubbornly remaining almost totally calm, we let go our kedge-anchor in 36 fathoms of water on a bottom of soft mud. The Etoile moored further to the north and closer to the shore. We had passed the first narrow part of the strait of Bouton.

Our third & fourth anchorages.

On the 14th [September] we got underway at 8 o'clock in the morning; we proceeded, all our sails set, with no more than a light breeze and sailed on until midday. We then, having caught sight of a sand bank to the South S West, anchored once again in 20 fathoms on a bottom of sand and mud.

I dispatched one of the ships boats with instructions to take soundings in the area of the sandbank. During the morning several canoes came alongside us; one of them had an unfurled Dutch flag flying at the stern. As this craft drew near all the other canoes dispersed in order to make way for it, for this vessel belonged to an Orencai, a sort of local chieftain. These local rulers are granted by the Dutch East India Company the right to fly their national flag.

At one o'clock that afternoon, with the intention of making a few leagues progress, we raised our anchor and set sail once more. But, it turned out impossible to make headway because what little wind there was light and it very soon dropped away completely. We were, in fact, set back about half a league, and, at half past three that afternoon, we once again anchored in 13 fathoms on a bottom of sand, mud, broken seashells and coral.

Advice to navigators.

Mr le Corre, whom I had sent off in a boat to take soundings between the sandbank and the shore, returned and reported the following information. Close to the bank the water depth was between 8 and 9 fathoms. However, as one made one's way across this fine bay, and got closer to the lofty and steep Bouton coastline, the water depth constantly increased until at about half way between the sandbank and the coastline no bottom was to be found even with 80 fathoms line. We concluded therefore, that if this period of calm continued the most suitable place to moor would be close to the sandbank. We were not concerned by its proximity as the holding ground in this location was extremely good. Several others sandbanks extended between this one and the coastline of Pangesani. Thus it is my recommendation when transiting this part of the strait to keep in as close as possible into the shore of Bouton. It is along this coast line that the best anchorages are to be found; besides of which, there are no hidden dangers there; and, it is in this location, that one is likely to get best advantage of the wind.

From here, almost to the exit from the strait, the coastline on this side comprises almost entirely of a chain of islands. Between these islands and in the coastline itself there are magnificent bays where excellent moorings are to be had.

Continuation of our passage and a description of the strait.

The night was dry and clear with no wind at all. On the 15th at 5 o'clock in the morning we weighed and set sail with a light East S Easterly breeze; I set a course to take us in close to, and then to sail along, the coastline of Bouton. By half past seven that morning we had rounded the sandbank, but, shortly afterwards the breeze died away. I turned out and lowered our ship's boats and sent them ahead of us and then sent a signal to the Etoile to do the same. The tide being in our favour we used the boats to tow us until three o'clock that afternoon. We passed two magnificent bays where I am certain we would have found excellent anchorages. However, for the entire distance along this coastline, though we were not very far distant from this mountainously steep land, the water was always too deep for us to obtain soundings.

At half past three a good fresh East S Easterly breeze sprang up and we shaped our course to go in search of an anchorage within easy reach of the narrows leading to the exit from the strait; but, no sign of the end was to be seen. On the contrary, the further we advanced that, which we had considered to be the end of the straight, seemed to recede away from us. The land on either side of the strait, as viewed from our present perspective, crosses one part behind the other giving the appearance of an unbroken shoreline and gives no indication of where the exit from the straight might lie.

By half past four we were halfway through and lay to the west of the mouth of a shallow bay. At this time we caught sight of a local craft which appeared to be on a southerly heading. I sent one of the ships boats in pursuit of it with instructions to bring it alongside; it being my intention to obtain a pilot from amongst her crew. While we waited for the boat to return our other ships boats were employed in taking soundings.

Only a short distance from the shore, and, almost opposite the point forming the most northerly part of the bay, the water depth was 25 fathoms on a sea bed of sand and coral; but, not very far away from there no bottom could be found. I went about and hove-to under top sails to give the boats time to take soundings. After we had gone past the opening of the bay our soundings once again found bottom for the entire length of the coastline on the southern side of the bay.

The ships boats signalled to us water depths of 45, 40, 35, 29 and 18 fathoms on a muddy bottom. We lay off our course, and, with the assistance of the ships boats, made our way towards this anchorage. At half past five we let go one of our bower anchors in a water depth of 35 fathoms on a seabed of soft mud. The Etoile moored to the South of us.

The fifth anchorage.

Not very long after we had moored our boat returned alongside accompanied by the Malayan vessel; they had experienced no difficulty whatsoever when they requested them to follow them back to the ship. We took on board one of their crew who asked a fee of 4 ducatoons (about 5 francs, 12-13 shillings sterling) to act as our guide. This contractual arrangement was immediately agreed and entered into. This pilot took up his station on board us and his canoe went off toward the other side of the passage to wait for him there. He told us that in the innermost part of a bay, adjacent to the one

which we had just entered, there was a short and easy portage for the canoe. As it turned out we could quite easily have dispensed with the services of this pilot for the weather, as we approached the anchorage, was fine and clear. We could see, off to the South S West $\frac{1}{4}$ West, the sun lighting up the point forming one side of the exit on our port side. However, it is very difficult to determine the exact position of the opening because on the side to port of us it is overlapped by a stepped rock forming the point on our starboard side.

Some of the ship's officers took the opportunity, while we were moored, to go ashore and stretch their legs. They found no signs of habitation within the immediate area of our anchorage. They explored the woods which entirely cover this part of the countryside, but, found no evidence of agricultural production or anything else of any real interest other than the discovery of a small bag containing dried nutmegs on the ground close to the sea.

At half past two the next morning we began to shorten in our cable, however, it was not until four o'clock that we got under sail. Progress was slow, but, with an occasional tow by the ships boats, we eventually reached the mouth of the passage. We could see, from the degree to which both banks had been exposed, that it was low-water. As we had already established that the flood tide comes from the north, we eagerly awaited a favourable current. We would, however, have had to wait a very long time. In this region the flood tide comes from the south, at least it does at this time of the year. I had not, at that time, been aware that the seasonal change in the direction of the flood tide has its limits. The wind by now had increased in force considerably and was coming from astern of us. Nevertheless, even with the aid of this favourable wind we struggled in vain for an hour and a half to make ground against the current.

The sixth anchorage.

At first the Etoile started losing ground and then to fall astern until she was forced to moor almost in the opening close to the shore of Bouton and in a sort of elbow where an eddy somewhat reduced the strength of the current. We in the Boudeuse struggled on for another hour and with the help of the wind we held our own against the current. In the end though, the slackening wind caused us to fall astern and lose more than a mile of hard-won ground. At one o'clock in the afternoon I put down an anchor in 30 fathoms on a bottom of sand and coral. I kept the sails set and filled and steered the ship to ease the weight on our cable as we had deployed only a light kedge-anchor.

We leave the Strait of Bouton; description of the narrows.

For the entire day our ships were surrounded by canoes. They came out to us laden with foodstuffs, curiosities and the lengths of cotton fabric and then went away again; just as if it was a market day. We traded with them without slackening our speed through the water. By four o'clock in the afternoon, the wind having freshened and it being almost high water, we recovered our anchor and with all our boats going ahead of the frigate we made our entrance into the passage. We were closely followed by the Etoile being towed by her own boats in the same manner as we were. By half past five, with a feeling of relief, we were past the narrowest part, and, at half past six, we anchored beyond the strait in the Bay of Bouton, directly below the Dutch settlement.

Let us now go back and describe, in a little more detail, the nature of the Bouton Strait. When one approaches the strait from the north the actual entrance cannot be seen until one is within a mile's distance of it. The first thing that catches the eye is, on the Bouton coastline, a rock standing some

distance from the shore which has been undercut by the action of the waves. This gives it something of the appearance of a galley with her awnings set and with a part of her hull collapsed or carried away. It is the bushes which grow on this feature that give it the appearance of it being tented. At low-water the "galley" is connected to the bay, but, at high tide, it becomes an islet. The profile of the land in this part of Bouton is of medium height and it has many houses built upon it. The shore at this location is enclosed by fish traps. On the opposite side of the strait the terrain is comprised of steep cliffs. The point on that side, which is the commencement of the strait, is easily recognised because the rock is faulted in such a manner that it forms two separate levels.

As soon as we had passed beyond the "galley", the shore on both sides of the strait became very steep; in places they actually overhung the channel. It appears almost as if King Neptune had struck the land with his trident in order to create a channel for the release the dammed up waters accumulated beyond the land. However, on both sides of strait the coastline presents a most charming prospect. The Bouton side is cultivated in terraces which gives it the appearance of being an amphitheatre. The land is everywhere studded with houses except in those places where the land is too steep and thus precludes convenient access. All those parts on the Pangesani shore, with the exception of the areas of native rock, are almost entirely covered with trees; but, along the length of it, we saw no more than two or three habitations.

At a distance of between 1½ and 2 miles to the north of the passage, closer to the Bouton side than to that of Pangesani, we found water depths of 20, 18, 15, 12 and 10 fathoms over a seabed of mud. As one advances southwards into the canal the seabed changes and becomes a mixture of sand and coral with water depths varying from 12 to 35 fathoms; in places our soundings found no bottom.

Advice relating to navigation in the Bouton Strait.

The total length of the passage is about half a league; its estimated width varies between 250 and 750 metres. The run of the passage meanders to follow the shore-line of the island of Pangesani where, for about two thirds of its distance, fish traps have been constructed. The presence of these structures indicates that the most prudent course is to keep in close to the Island of Bouton. In general, it is necessary to keep to the centre part of the channel in the more narrow sections. Additionally, a most sensible precaution, particularly during conditions of fresh and favourable winds, is to send the ships boats ahead of the ship to assist her to hold an appropriate heading while confined in the sinuosities of the strait.

Generally speaking, the current here it is strong enough to carry a vessel through in times of calm or even against a light contrary breeze. It is not sufficiently strong, however, to take a ship forward against a fresh headwind or to make it possible to claw a way forward by running short boards under top-sails.

When one has passed out of the strait there is a chain of islands which run from the south to the west of the Bouton coastline and they, with the littoral of Pangesani, give the appearance of forming an extensive gulf. The best anchorage here is about 1 mile offshore and directly opposite to the Dutch establishment.

Our Boutonian pilot was of considerable assistance to us; as much indeed as a man can be who, although totally familiar with local conditions, has no idea whatsoever how modern European ships are handled. He took great pains to give us advance warning of any dangers, sandbanks or the locations of anchorages. His greatest limitation was of being blissfully unaware that it is impossible to simply point the ship in the direction you want it to go. He had no understanding that it was essential

for us to keep close upon the wind in order to always retain the weather gauge. He was also under the impression that our ships drew 8 to 10 fathoms of water. On the morning he came onboard he had with him a companion who was a very knowledgeable old man. It is possible that they were father and son. The pair of them stayed with us until the evening, at which time I had them taken ashore in one of the ships boats.



Their village, we learned, is situated adjacent to the Dutch establishment. During the time that they were with us they refused to eat any of our food, even the bread they would not touch and they subsisted upon nothing more than a few bananas and by chewing the betel-nut. Their religious sensibilities did not, however, extend to preventing them, both father and son, from imbibing brandy in a very free manner. It was, perhaps, their philosophy that only wine that had been forbidden them by the Prophet Muhammad!

We are visited by a great multitude of the local people.

At five o'clock on the morning of the 17th we were once again under sail. The wind, light at first, was unfavourable to us, but, sometime later became fresh. We continued making boards to hold our ground. The next day, as the first rays of sun began to light up the world, we saw a great fleet of canoes coming out towards us from the shore. Within a very short time our ships were completely surrounded and a lively system of barter had been established with them. Both parties were completely satisfied with the nature of this trading.

We were aware that they were obtaining goods from us more advantageously they would have when dealing with the Dutch; even so, the price we paid for what we received was derisory. Our crew members obtained for themselves a great quantity of eggs, fruit and poultry. Everywhere about the two ships, even as high up as our tops flocks of these fowls that had been acquired by the men were to be seen.

I most strongly recommend that those mariners who visit this place after us provide themselves with a good supply of the coinage the Dutch make use of in the Moluccas; in particular their silver 2½ sol pieces. The local inhabitants of this place knew nothing of the coinage we had available, neither did they set any value on Spanish reals or the pieces of 12 and 24 sols value that we had brought with us. The great majority of them completely refused to accept this money. These people had cotton goods which were far more attractive and of much better quality than any others we had previously seen available for exchange. They offered us, in enormous quantities, several species of parrots and cockatoos displaying the most beautiful plumage.

Shortly before nine o'clock that morning we received a visit from five of the orencaies of Bouton. They came out to us in a boat that appeared to be of European construction with the exception that it was propelled by means of paddles rather than oars. At the stern of their craft a large Dutch flag was flying. These orencaies, or chieftains, were very elegantly dressed; they wore long trousers, camisoles with metallic buttons and turbans; the other people who accompanied them were naked. They also carry a distinctive symbol, given to them by the company. This takes the form of a baton with a silver head upon which is engraved the following mark.  The most senior amongst them have, additionally, a letter M in the following fashion . They had come to us; we were informed, as representatives of the Dutch East India Company. When we told them that we were French it did not appear to cause them the slightest anxiety. They volunteered their assistance and offered their respects to the French nation. The words of friendship that they spoke to us were supported by the gift of a young roe-deer. I presented them with some lengths of silk in the name of the King of France. These they divided into five portions. I pointed out to them the French flag with the objective of enabling them to recognise our ships in the future. I asked them if they would join me in a glass of brandy; it was obvious that this was exactly what they had hoped for. Mohammed apparently, had given his consent that they may drink toasts to the health and prosperity of the Kings of Bouton, of

France, of the Dutch East India Company and to the future good fortune of our voyage. They offered us all the help it was in their power to give and added that at various intervals over the past three years three English vessels had passed through the strait and that they had been provided with water, wood, poultry and fruit. They said that they had become good friends with the English and hoped that they would also become good friends with us. This was our invitation to refill their glasses; something we were happy to do even though they had already polished off a considerable number of bumpers!

During the course of our discussion they informed me that the King of Bouton had his residence in the part of the island where they themselves lived. It was apparent from their comportment that they were familiar with the more refined lifestyle of capital city dwellers. They referred to the King as the Sultan, a form of address they had no doubt taken from the Arabs at the same time they assumed their religion.

This Sultan is a most powerful despot, assuming that the number of his subjects is an indication of his authority, for his domain is extremely densely populated. The Orencaies, after they had begged their leave, paid a visit to the Etoile where they resumed drinking toasts to their new-found friends. So great was the quantity of alcohol they put away that it was necessary to tactfully assist them into their canoes when they finally decided to leave us.

Situation of the Dutch on Bouton.

In between rounds of drinking multiple toasts, I had asked the chiefs whether spices grew on their island; they told me they did not. I really believe they were speaking the truth because the establishment that the Dutch maintain here is of extremely modest size. It consists of a group of seven or eight sheds constructed from bamboo surrounded by a sort of palisade into which a flagpole had been incorporated.

The Company's resident staff here consisted of a sergeant and three private soldiers. The local coastline presents the eye with the most pleasing of prospects; everywhere the land has been cultivated and it is dotted with huts. There have been set out here a great number coconut of plantations. The land is quite elevated and everywhere its gently sloping terrain is formed into carefully cultivated gardens. All along the coastline fish-traps have been constructed. The coastline on the opposite side of the strait to Bouton is no less pleasing to the eye, nor is it less densely populated. The man who had served us as a pilot came to see us again that morning; he brought us a gift of coconuts, the quality of which was the best we have ever seen. He warned me that once the sun had risen a very strong breeze from the south-east would start to blow. In recognition of his most useful advice, I gave him a very large glass of brandy. As it approached 11 o'clock we noticed that all the canoes at sea were returning towards the land and were being hauled up onto the beach to prevent them becoming damaged by the coming strong winds. Sure enough, just as our former pilot had forecast, a stiff south-easterly breeze then sprang up and with it we made a board to take us towards an island to the west of Bouton. This permitted us to set a course to the West S West and then, despite the unfavourable current, maintain a very respectable speed through the water.

Navigational advice.

At this point I feel obliged to give warning; it is essential to beware of a sand bank that extends a good distance towards the offing from the island I have just spoken about. That notwithstanding, during the entire time we spent tacking this morning, our soundings never once found bottom with 50 fathoms of the line.

Our midday observation put our position as 5° 31' 30" south and this observation together with the one that we made when we entered into the strait enabled us to determine its precise length. At three o'clock that afternoon we approached the extreme southern extremity of the island of Pangesani. On the morning of the following day we sighted the high mountains on the island of Cambona, one of the peaks of which penetrated through the clouds and showed above them. As half past four approached a part of the land belonging to the Celebes appeared above the horizon. At sunset that evening we hoisted in our boats, spread all our canvas and set a West S Westerly course and in this manner we continued on until 10 o'clock that evening; we then changed our heading to West ¼ S West, we reduced sail and continued on under studding sails aloft and alow.

Remarks on this navigation.

My intention at this time was to continue on this course in order to get us into a position 3 or 4 leagues to the south of the most southerly point of the island of Selayar; which is to say between 5° 55' and 6° South latitude. Our expectation being that we would come upon the Selayar Strait which lies between this island and the Celebes. The Celebes coastline it is not in sight for most of the time that one is sailing along it, this because this part of the coastline, almost from Pangesani, forms a gulf of great depth [the Gulf of Boni]. On the other hand, if the route passing to the south of Bouton is chosen, it would be essential to head towards the Selayar Strait immediately after the Tukangbesi (*Toukan Bessie*) has been passed. In so doing, the opinion I earlier expressed, (that the Strait of Bouton is in every respect the preferred route) will be confirmed. Taking passage through the Bouton Strait is one of the safest and most enjoyable navigations that could possibly be wished for.

The advantages of going by the preceding route [the Bouton Strait].

This excellent route combines the advantage of having many fine anchorages permitting the navigation to be pursued at one's convenience; that is to say, when tides and currents are most suitable. There are many ports of call where provisions are in good supply. The abundance of refreshments now enjoyed by our ships company is in stark contrast to the conditions of near starvation we suffered so short a time ago and the symptoms of the scurvy seem to disappear before our very eyes.

There was however, an outbreak of stomach complaints and diarrhoea due to the sudden change in diet. This most unpleasant condition can be most injurious in tropical countries where it often deteriorates into a bloody flux; or even worse, into one of those tropical illnesses common in the Moluccas region. On shore and at sea it is a fatal error to sleep in the open air, particularly when the atmosphere is muggy.

Passage through the Strait of Selayar.

On the morning of the 18th, with no land in sight, it was my opinion that the currents had set us back about 3 leagues during the night. We continued on our course of West $\frac{1}{4}$ S West and at half past nine we could clearly see the mountains of Selayar bearing between West S West and West $\frac{1}{4}$ N West. As we continued on we recognised a less lofty point which appeared to be the extreme northerly end of that island. I brought the ship round onto a heading of West $\frac{1}{4}$ N West in order to take a closer look at the conditions in the strait. This quite narrow passage, formed by the lands of the Celebes and those of the Island of Selayar, is further constricted by three islands which lie within it. The Dutch have named these islands the *Bougerones* and the Strait the *Boutsaron*. The Dutch maintain a post on the island of Selayar which is commanded at this time by one Jan Hendrik Voll who is a bookkeeper.

Description of this passage.

Our noon observation put us at 5° 55' south latitude. Initially, we thought we could see the first of the islands which lie to the north of the less elevated land that we had taken to be the point of Selayar. But, it turned out to be no more than some quite elevated land. The extreme end of this land could only just be discerned above the level of the sea where it was joined to Selayar by a tongue of extremely low-lying land. At the same time we saw 2 islands, separated by a distance of about 4 leagues; these were quite long and of medium elevation. As we got closer to them we could see that there was a third, small and quite low-lying island situated between them. The most suitable course lies close to the small island and by passing either to the north or to the south of it. I decided to go to the south as this seemed to offer the widest passage. In order that I can provide a narrative of our passage through the strait I will give this small island the name Passage Island and the other two, Southern Island and Northern Island, respectively.

When we had completed our reconnaissance of the passage, I lay-to for the night and awaited the arrival of the *Etoile*. She didn't rejoin us until eight o'clock that evening at which time we had, whilst keeping to the centre of the channel, made our entrance into the strait. The width of the channel here was some 6 or 7 miles. At half past nine we were on a north-south line from Passage Island and the centre of South Island which bore between south and South $\frac{1}{4}$ S East. We now set our course on a heading of West $\frac{1}{4}$ S West and continued on until one o'clock in the morning when we hove-to and lay on the port tack until four o'clock in the morning. During our approach toward the strait, and after we had actually entered it, we took several soundings but found no bottom with 20 and 25 fathoms line.

Description of this part of the Celebes.

At dawn on the morning of the 19th [September] we closed with the Celebes coastline and ran along it at a distance of some 3 or 4 miles. It is truly difficult to imagine seeing a more beautiful countryside anywhere in the world. We had in front of our eyes a splendid panorama; a background of high mountains at the foot of which, in the foreground, there lay an immense and extensively cultivated plain with many houses. On the strip of land bordering the sea there stood a great number of lofty coconut palms.

To our sailor's eyes, we having been only recently relieved from many months of eating nothing but salted meat, the prospect of herds of cattle grazing amongst the copses; with which this spectacular

plane is dotted, was the most ravishing sight imaginable. This entire region appeared to be well populated. Half an hour later we had reached a position opposite a large village, the houses of which had been constructed in amongst coconut groves extending along the shore for a considerable distance. Along this part of the coastline we found the water depth to be between 18 and 20 fathoms on a seabed of grey sand and the water depth decreased rapidly as we approached the shoreline. The most southerly part of the Celebes coastline terminates in 3 points; all 3 of them are of considerable length, level and quite low-lying. Between these 3 points there are 2 quite deep bays. At two o'clock that afternoon we made an attempt to draw close to a Malay vessel, in the hope that there would be someone on board able to give us local geographical information. When this vessel observed that we were in pursuit it immediately headed for the shore; by the time we had approached to within musket shot she was between us and the coastline. Under our keel there was now less than 7 fathoms of water. We fired off three or four cannon shots to which he paid absolutely no regard. The crew, perhaps, took us for a ship belonging to the Dutch East India Company and was fearful that they might be taken into slavery.

Almost all the people living along this coastline are pirates and the Dutch, when they can catch them, cast them into slavery. We were thus obliged to abandon our pursuit of this boat and I signalled to the *Etoile* for one of her boats to go ahead of me and take soundings.

Navigational difficulties in this locality.

We were by this time almost opposite the third point extending from the Celebes which is called Tanakela and from where the coastline lies in a North N Westerly direction. Almost due north from this point there are 4 islands of which the largest, also called Tanakela. It is, like the point to the south-west of the Celebes, low-lying, level and has a length of some 3 leagues. The 3 other islands, all further to the north than Tanakela, are extremely small. The navigation at this point is a matter of skirting around the dangerous shoal water lying off Brill, known also as the Spyglass, which I believe, runs north-south from Tanakela for a distance of some 4 or 5 leagues at the outside. A choice between one or another of two passages now presents itself. The one lies between the point of Tanakela and the islands and is, I believe, the route used by the Dutch. The other route is between Tanakela and the Spyglass; this is the one I chose because I considered it less complicated and wider.

I gave instructions to the *Etoile's* boat to follow a route so as to pass the island of Tanakela at a distance of about one and a half leagues. As she proceeded I followed her under top-sails with the *Etoile* following in my wake. As we progressed our soundings indicated water depths of 8, 9, 10, 11 and 12 fathoms of water; at first we steered West N West and then West $\frac{1}{4}$ N West and later due west. By this time the water depth had increased to 13, 14, 15 and then 16 fathoms; the most northerly of the islands now bore North N East. I recalled the *Etoile's* boat, until I had further work for it, and made a course South W $\frac{1}{4}$ South, taking soundings at half hourly intervals. We found the water depth to be constantly between 15 and 16 fathoms on a seabed of the coarse grey sand and gravel. At 10 o'clock that evening the water depth increased until by half past ten we had 70 fathoms on sand and coral after which, even deploying 120 fathoms of line, we found no bottom.

At midnight I made a signal for the *Etoile* to recover her boat and to spread more canvas; I then set a south-westerly course in order to pass between the Spyglass and the Saras Bank¹⁶⁰ in the middle of the

¹⁶⁰ From Bougainville's text I have assumed the shallow water and low-lying islands, to the West S West of Tan'akela Island to be the Saras Bank, but, have not been able to confirm this from other sources.-JFF

channel. Although we sounded at half-hourly intervals we found no bottom. I feel obliged to mention here that when the wind is unfavourable or is not sufficiently fresh, it is necessary, in order to safely double the Spyglass, to anchor in one of the bays along the Celebes coastline and here to wait for suitable weather conditions. Failure to take this precaution entails running the very real risk of being cast upon the dangerous shoals of Saras at a time when weather conditions provide no opportunity to prevent it.

The continuation of our route.

At daybreak on the following morning no land was to be seen; at 10 o'clock I set a course to the West S West and our midday observation made our latitude $6^{\circ} 10'$. I estimated that we had now doubled the Saras Bank; at least I was sure that we were to the south of it and I altered course to the West $\frac{1}{4}$ N West. At hourly intervals we cast the lead, but, continued to find no bottom. We now entered into the channel between the Hen & Chickens Shoal (*la Poule & Sestenbanc*) to the north of us and the Great Paternoster Islands (*Pater noster & Tangayang*) to the south. We sailed on with all canvas spread both at night-time and during the day in order that we would be able to take soundings while still keeping up with the Etoile. I had been told that in this locality the current sets toward the islands and the sandbanks of *Tangayang*. However, and contrary to that, our observation of the sun's altitude at noon, which was $5^{\circ} 44'$, indicated a difference of at least $9'$ to the north.

The best advice I can give is to keep to a course such that soundings show no bottom. In so doing one will be certain to be in mid-channel; whereas, if one approaches too closely the islands to the south, water depth no greater than 30 fathoms will be encountered.

We sailed on during the entire day of the 21st in order to make a reconnaissance of the Islands of Alambai. Our French charts showed that there are 3 of them lying close together and another, the largest of them, which lies towards the south-east, at a distance of 7 leagues from the main the group. This island however, does not exist at the position where it is indicated and all the 4 islands indicated, comprising the Alambai group, are joined together.

I considered by sunset that we had arrived in the latitude of these islands and I set a course West $\frac{1}{4}$ S West until we lost sight of the land on either side of us. During the daytime we were no longer taking soundings, but, by eight o'clock that evening we took a sounding which showed us in 40 fathoms of water on a seabed of sand and mud. We set a course to the South W $\frac{1}{4}$ West and then West S West until six o'clock the following morning when, now considering that we were beyond the islands of Alambai, we came round to West $\frac{1}{4}$ S West until midday. Our soundings during the night up until four o'clock in the morning had shown the depth to be constant at 40 fathoms on a seabed of soft mud; after that time it shallowed to 38 fathoms.

At midnight we saw a boat heading in our direction but, as soon as she saw us, she hauled her wind; we fired 2 cannon rounds across her bows, but, this failed to convince her that she should come alongside us. The inhabitants of this region, or so it seems, live in greater fear of the Dutch than they do of cannon fire!

The following morning we saw another vessel, however, she was no keener to approach us than the previous one had been. Our midday observation put us at $6^{\circ} 8'$ of latitude and once again this observation gave us a difference $8'$ north of our estimated position.

General remarks on the navigation in this locality.

We were at last clear of all the navigational perils that beset those who navigate in the region between the Moluccas and Batavia. The Dutch take the greatest care to keep details of the charts they use for navigation in this region a closely guarded secret. It is quite within the realms of possibility that they intentionally exaggerate the dangers that mariners are subject to in these waters. My own, if somewhat limited, experience indicates there is little difficulty in taking passage via the Strait of Bouton, the Selayar Strait, via the passage through which we had just recently passed or in negotiating the 3 “monstrous” features in the locality of Boero; the notoriety of which the Dutch had taken such pains to emphasise. However, I am convinced that making this passage in the opposite direction, from west to east, would be considerably more difficult.

The locations, where it is practical to make a landing, in the eastern section of this region, are considerably less convenient, from a safety point of view, and far easier to miss than are those which exist in the western part. Nevertheless, irrespective of the direction in which one is travelling it is essential to determine latitude by making good daily observations; failure to take this seamanlike precaution is likely to result in the most serious consequences.

We have not been able, during these past few days for lack of points of reference, to evaluate whether the effects of the currents here are toward the east or to the west.

Inaccuracy of the existing charts for this region.

I am now obliged to give a most important warning concerning considerable inaccuracies and errors that exist in the French charts for this region. They indicate incorrectly not only the position of coastlines and islands but also give important latitudes erroneously. The locations of the Straits of Bouton and Selayar are particularly badly represented for, in the latter, even the 3 islands that serve to reduce the width of the passage are not shown. In the same way they fail to show those islands lying to the North N West of the island of Tanakeka.

Mr d’Après did, at least, make a point of issuing a warning that, both his chart of the Moluccas and that of the Philippines, was unreliable as he had been unable to obtain sufficient detailed information concerning those places.

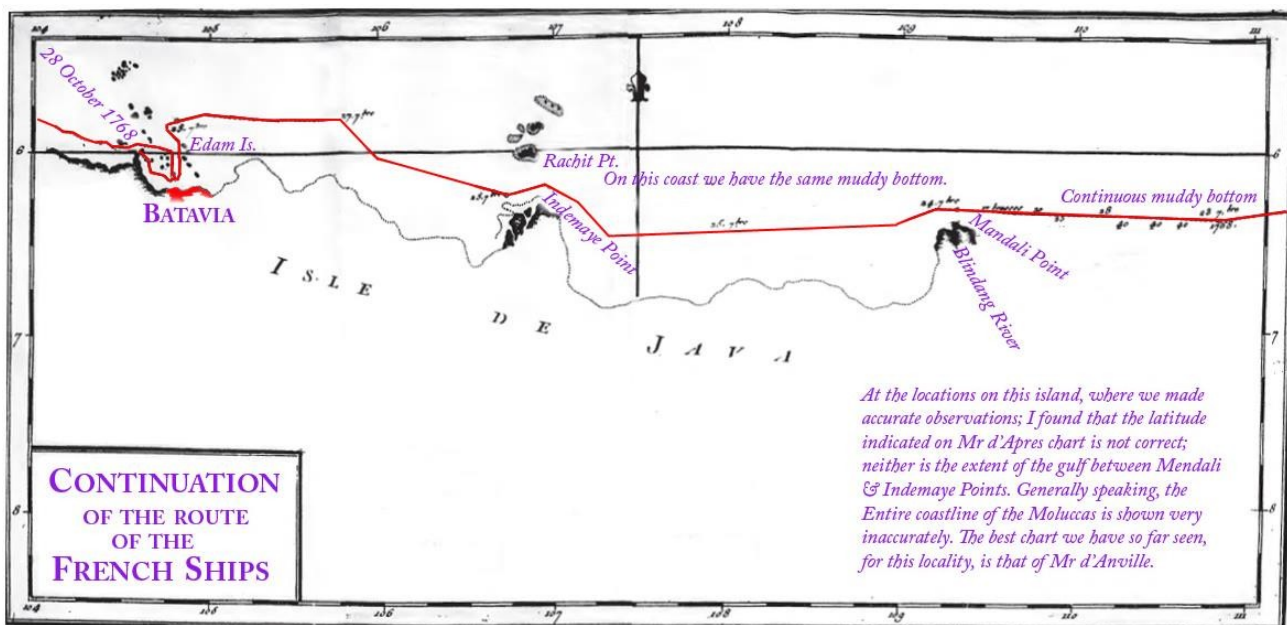
For the well-being of navigators it is my heartfelt wish that similar honest and objective expressions of caution be made by all those who compile charts. The chart that gave me the greatest assistance was the one of Asia compiled by Mr Danville¹⁶¹, published in 1752.

¹⁶¹ Jean-Baptiste Bourguignon d’Anville, (born July 11, 1697, Paris, France—died Jan. 28, 1782, Paris), French geographer and cartographer who greatly improved the standards of map-making. From an early age d’Anville continued the reform of French cartography, begun by Guillaume Delisle, but, he was also a reputed classical scholar, many of his memoirs and maps relate to ancient and medieval geography. He displayed exceptional judgment in his choice and use of past authorities and a detailed knowledge of measures of distance. He adjusted his measurements, where possible, to astronomically determined positions. His first important map was that of China, prepared from the surveys of the Jesuits; first issued in 1735, it was later published as the *Nouvel Atlas de la Chine* (“New Atlas of China”) in 1737. His map of Italy (1743) corrected numerous errors in the accepted maps of that country. Other important maps were of Africa (1749), Asia (1751), India (1752), and the world in hemispheres (1761). From the contemporary map of Africa, d’Anville removed many of the

This chart is very accurate from Ceram to the islands of Alambai. During the course of the route we followed I was able to verify, by my own observations, the exactitude of the positions and coastal details he gives concerning all the important locations encountered in the course of this difficult navigation. I should also like to add that the information he provides concerning New Guinea and the various islands of Papua, is the closest representation, of the true geographical situation, than is the case on any other charts I have had in my hands. It is with the greatest personal pleasure that I pay tribute to the accuracy of the document resulting from Mr Danville's work. Further, on those occasions when I have been in his company he has appeared to me to be as a good citizen as he is a fastidious and meticulous cartographer and erudite scientist.

From the morning of the 22nd until eight o'clock the following day, that is to say the 23rd, we pursued our route to the West $\frac{1}{4}$ S West, then we turned onto a heading of West S West. During this period our soundings gave water depths of 47, 45, 42 and 41 fathoms and I can state with conviction that the seabed here, and all along the Java coastline, is a most excellent holding ground comprising, as it does, of soft mud. Once again, when we made our noon observation, we observed $6^{\circ} 24'$, putting us 7 minutes to the north of our estimated track.

We received a signal from the Etoile saying that she had had land in sight since six o'clock that morning; however, the weather having now turned squally, we ourselves were unable to see it. Shortly after midday I set a course more to the south and at two o'clock, from the mast-head, we raised the northern coastline of the island of Maduré. By six o'clock that evening it could be seen from the deck, but, the horizon was not clear enough for us to be able to estimate its distance from us. During that afternoon our soundings gave us a constant depth of 40 fathoms. We saw a great number of fishing boats some of them were at anchor and had fishing nets deployed.



We sight the Island of Java.

The winds during the night varied from south-east to south-west and, when we were on the starboard tack, we kept as close to the wind as possible. From 10 o'clock that evening our soundings gave us 28, 25 and then 20 fathoms; when it was down to 17 fathoms, we considered we were as near to the land as we wished to be, but, by midday, the depth beneath us was only 10 fathoms.

The elevated ground of the Point of Alang, on the island of Java, bore South E $\frac{1}{4}$ South at a distance of some 2 leagues. The island of Mandali¹⁶² to the South W $\frac{1}{4}$ West 2° South, 2 miles and the lands lying more towards the west and the West S West were about 4 leagues off. While we were in this location we made an observation which puts us at $6^{\circ} 22' 30''$; this corresponded, almost exactly, to our estimated position.

Geographical observations.

When we marked our noonday position, based on the bearings we had taken, onto Mr d'Apré's large-scale chart we became aware that:

- 1) The coastline of Java is marked between 9 and 12 minutes further to the south, according to the average result of our noontime observations, than it's true position.
- 2) That the lie of the coastline, from Point Alang, is not correctly shown in that it is indicated to be running to the West S West and South W $\frac{1}{4}$ West, when, in reality, from Mandali Island onwards it runs towards the West $\frac{1}{4}$ S West for about 15 miles after which it resumes its southerly direction so forming a great gulf.
- 3) That the chart gives too great an extent to this part of the coastline. If we had followed the bearings indicated on the chart between one noon sight and the next we would have made 13 miles less progress to the west than was in reality the case. This could have caused us to be uncertain, that is to say, is the extent of the coastline, as shown on the chart, really too great or is it the case that the current was setting us towards the east.

We meet some Dutch ships.

Beside the great number of fishing vessels we encountered this morning we saw 4 ships, carrying unfurled Dutch ensigns, sailing in the same direction as ourselves. At three o'clock that afternoon we had approached close enough to engage one of them in conversation. She was a snow from the Malaccas en route to Japara¹⁶³. Her consort, a three-masted ship, also out from the Malaccas, was bound for Saramang¹⁶⁴. A short while afterwards both ships anchored close to the shore. We sailed on along the coastline at a distance of about $\frac{3}{4}$ league until four o'clock that evening when I set a course West $\frac{1}{4}$ N West in order not to become embayed within the gulf and to pass on the seaward side of a large coral reef which lies about 6 leagues from the land.

¹⁶² Pulau Mandaliki.-JFF

¹⁶³ Central Java $6^{\circ} 30'S - 110^{\circ} 38'E$.-JFF

¹⁶⁴ In Central Java $6^{\circ} 56'S - 110^{\circ} 25'S$.-JFF

At our present location the coastal strip of Java is quite low-lying but further inland lofty mountains can be seen. At half past five the centre of the Carimon-Java Islands¹⁶⁵ were bearing North 2° West at a distance of some 8 leagues.

Our route along the coastline of Java Island.

We ran on a heading West ¼ N West until three o'clock the following morning after which time we set a westerly course until midday. The water depth, which the previous evening had been between 9 to 10 fathoms even quite close to the shore, now fell away and by seven o'clock that evening we had 30 fathoms under the keel. The depth increased during the night to 32, 34 and then to 35 fathoms. When the sun rose that morning there was no land in sight, nothing to be seen but one or two ships and, as is normally the case in this locality, a great multitude of fishing vessels. Unfortunately, during the greater part of the 25th [September 1768] until five o'clock in the evening, the weather was calm. Although I used the word "unfortunately" it was, in truth, rather more serious than that; what we really needed was to be able to study the coastline before nightfall in order that we might with confidence set our course to pass between Indemaye Point and the Rachit Islands and to pass on the seaward side of the submerged rocks on the western side of Rachit Island. At midday our observation put our latitude at 6° 26' and, from that time, we steered a course between west and West ¼ S West, but; by sunset we had still not sighted land. Some of the crew thought, but, without certainty, they had caught a glimpse of the Blue Mountains which are situated 40 leagues to the east of Batavia. From six o'clock that evening until midnight we steered a course between west and West ¼ S West. We took soundings every hour finding depths of 25, 24, 21, 20 and 19 fathoms. At one o'clock the following morning we came around to a course of West ¼ N West and then; between two o'clock and four o'clock, we steered north-west than North W ¼ West until six o'clock.

At one o'clock I estimated that we were in the centre of the channel between Rachit Island and the mainland of Java and I made it a firm objective to get into a position well to the north of the rocks. Our soundings on 3 occasions had given us depths of 20 fathoms and afterwards 22, and then 23. At this time I estimated our position to be 3 or 4 leagues to the north or north-west of the Rachit Islands.

Error made in estimating our position.

My reckoning of our present position was seriously inaccurate. With the first rays of the rising sun on the morning of the 26th [September] we saw the coastline of Java bearing between South ¼ S West and a few degrees north of west; by half past seven we could see the Rachit Islands from the masthead at a distance of about 7 leagues and bearing North N West to North W ¼ North. This sighting indicated there to be a considerable and dangerous error in Mr d'Après chart. However, I suspended judgement until after our midday observation, by the time of which it should become clear if the error was attributable to the effect of the currents or to inaccuracies in the chart. We steered to the West ¼ N West and then to the West N West in order to take a closer look at this coastline, in this region it is very low-lying and the interior displays a complete absence of high mountains. There was a stiff breeze blowing which varied between South S East, south-east and east.

¹⁶⁵ Now Palau Karimun or Karimun Jawa 5° 51'N - 110° 28E .-JFF

Courses of this error.

At midday the most southerly point of Indemaye was bearing East $\frac{1}{4}$ S E 2° South at a distance of about 4 leagues and the central point of the Rachit Islands bore north-east at a distance of 5 leagues; the average of our new observations of the sun's altitude put our latitude at $6^{\circ} 12'$. With the benefit of these bearings and the observations we had taken it appeared to me that the gulf lying between the Isle of Mandali and Indemaye Point is shown on the chart as having an east to west extent 22' less than is really the case. Additionally, the coastline as it is marked on the chart is 16' further to the south than we calculate it to be from our observations.

Exactly the same correction must also be made to the position of the Rachit Islands. Furthermore, it must be taken into account that the distance between the Rachit Islands and the coast of Java is at least 2 leagues greater than the chart indicates. The directions, in which various parts of the coastline hereabouts lie according to the chart, appeared to me to be quite accurate. That is to say as good as can be judged by successive estimates taken visually while coasting along it, whilst making allowance for the uncertain effects of the current. It is extremely important to keep in mind that the discrepancies, to which I have drawn attention, make night-time navigation using this chart a most perilous proposition.

Our route until we arrive in Batavia.

Our soundings since this morning have given successive water depths of 21, 23, 19 and 18 fathoms. The East S Easterly breeze remained with us and we followed the line of the coastline at a distance between 3 and 4 miles in order to pass clear to the south of those rocks which I have already mentioned which are shown on the chart as being 5 or 6 leagues to the west of the Rachit Islands. At one o'clock that afternoon a vessel that had been moored ahead of us got under way on the starboard tack. This caused me believe that the direction of the current was about to change and start to run counter to our direction. At two o'clock we spoke to this vessel; she was under the command of a Dutchman who appeared to be the only white man amongst a crew of mulattos. He told us that he was heading for Amboine and Ternate, having left Batavia, which he said was some 26 leagues distant. It was my intention, once we had completed the passage of Rachit Island and had passed to the south of the submerged rocks, to sail north-west in order to double the sandbanks, known as The Perilous Banks, which extend for a considerable distance into the offing between the points Indemaye and Sidari. The direction of the prevailing wind, however, prevented this and the best course we were able to make was West N West. As a consequence, I considered that under these circumstances, the best thing to do was to moor. I put down a kedge-anchor in 13 fathoms of water on a seabed of mud about a league distant from shore.

When we once again got under way we were only able to make short and somewhat hazardous tacks during our passage between the submerged rocks, on one hand, and, The Perilous Banks, on the other. The soundings we took from midday onwards gave us water depths of 19, 15, 14 and 10 fathoms. Prior to mooring, we ran a short board towards the offing where we found the water depth to be 13 fathoms.

On the 27th [September] we weighed anchor at 2 o'clock in the morning with the wind blowing off the land; during the night it had been blowing westerly, this represented a considerable change from previous nights when the wind direction had been; at first, northerly and then later going round through the east until it was just north of south.

We sailed a north-westerly course until, at 8 o'clock that morning, we once again saw the land. It was extremely low-lying, hardly appearing above sea level. We held the same course until midday. Since weighing anchor we had obtained soundings, of 13 to 16, 20, 22, 23 and 24 fathoms. At half past six the seabed suddenly changed to coral, but, almost immediately afterwards it once again became one of mud.

At midday our observation gave our latitude as $5^{\circ} 48'$; but, from deck level, we could not see the land, it being so low-lying. It could, however, be seen from the masthead bearing from the south round to the South $W \frac{1}{4}$ West at a distance we estimated to be 5 or 6 leagues. On this day, at noon, our observation, compared to our estimated position, was different by no greater than 2 or 3 minutes. This discrepancy we legitimately ignored as our distance run, calculated from the bearings we had taken, we considered to be accurate. The currents had pushed us somewhat towards the north and, I believe, also to the west. At our present position the coastline of Java, as shown on the chart of Mr d'Après, is indicated as being further to the south than, in reality, is the case.

Yet another error in the estimate of our position.

All this day we had fine weather and favourable winds; during the afternoon I took the ship a little further to the north in order to avoid the shoal-water off Sidari Point. At midnight, having considered we were now beyond the shoals, I set a course first to the West $\frac{1}{4}$ S West then West S West. Later on, seeing that our soundings at one o'clock in the morning had indicated 19 fathoms and now were increased to 27, I came round to the south-west.

At 3 o'clock in the morning we saw an island bearing North $W 5^{\circ}$ North at a distance of some 3 leagues. I came to believe that our position was more advanced than I had at first considered and I became concerned lest we should sail past Batavia.

With this in mind we anchored to await daylight and, with the coming of the dawn, we recognised all the islands of Batavia Bay. Edam Island, upon which a flag could be seen flying, bore South $E \frac{1}{4}$ South at a distance of some 4 leagues and Onrust Island (known also as Careening Island) bore South S West 4° South, almost 5 leagues distant from us. Thus we found ourselves to be 10 leagues further to the west than we had estimated. This difference we considered to have as its cause: the effect of the prevailing currents and the inaccurate manner in which this coastline had been charted.

At half past 10 in the morning I made a first attempt at getting under way; the wind, however, almost immediately fell away to nothing and, the flow of the tide being against us, I re-moored and lay to a kedge-anchor with the sails unfurled.

Half an hour after midday we once again got under way and set course for the centre of Edam Island until we were within $\frac{3}{4}$ league of it and the Dome of the great Church in Batavia was bearing due south from us. We turned towards it and passed between the beacons which indicate the channel. At 6 o'clock we anchored in 6 fathoms on a muddy bottom and lay to a single anchor in the roadstead. This is usual practice here, it being considered a secure enough anchorage; providing, of course, another anchor is always ready for letting go. An hour later, the Etoile anchored to the East N East of us 2 cable's lengths away.

Anchorage at Batavia.

And so it was on 28 September 1768, having, having been at sea for ten and a half months, we put down our anchor in one of the most beautiful colonies in the entire world.

Our arrival here signified, or so it seemed to all of us on board the ships, that, at long last, our voyage had come to an end.¹⁶⁶

Batavia, according to my calculations, is positioned at 6° 11' south latitude and longitude of 104° 52' to the east of Paris.¹⁶⁷

CHAPTER VIII

Stay at Batavia; details concerning the Moluccas.

The unhealthy season generally begins, in this locality, just as the easterly monsoon is finishing and as the wet westerly monsoon is beginning. It was our firm intention to remain in Batavia for only as long as was absolutely necessary. However, although we were most impatient to get away from this place as soon as possible, we had nonetheless, requirements that were likely to retain us here for several days. One issue that caused delay was the discovery that it would be necessary to bake our ships biscuit on board, as it cannot be obtained here ready cooked. This put our departure back for a much longer time than we had initially anticipated.

Lying in the roadstead on the day we arrived here there were 13 or 14 ships belonging to the Dutch East India Company. One of these wore an admiral's flag. She was an old ship posted permanently to this location where her duty was the control of the anchorage and returning the salutes of all the visiting ships.

The arrival ceremony.

I had already sent an officer ashore to render an account of ourselves when there arrived alongside us an admiral's barge. I was presented with a document, written in Dutch which, naturally, we did not understand the significance. There was no one in the boat except the coxswain who assumed the function of an officer and demanded to know who we were. He told us we were required to prepare a written deposition which was to be signed by myself. I informed him that I had already sent this information ashore and told him to move off. He returned a short time later and made the same request; I gave him the same reply and once again dismissed him and on this occasion he seemed to accept what I had said.

The officer, whom I had sent to call on the General ashore, did not return on board until nine o'clock that evening. He had been unable to gain an audience with his Excellency due to him being out of

¹⁶⁶ This is exactly how Bougainville expresses his thoughts. My feeling is that he is simply relieved that the very difficult time, they had experienced since leaving Boero, is now behind them and from now on it will be "plain sailing". -JFF

¹⁶⁷ It is in reality at a latitude of 6° 06' south and longitude 104° 27' east of Paris. Thus Bougainville's estimate is out by about 28 nautical miles (eastward) and 5 nautical miles (southwards) Not bad, for the period.-JFF

town. He had been taken to the Sabandar, who is the official appointed to deal with foreign visitors. He told my officer that he would arrange a meeting for the following day and that he was to inform me that should I wish to go ashore he would arrange for me to meet the General.

I visit the General of the Dutch East India Company.

Visits in this part of the world are made very early in the morning on account of the excessive heat. We left the ship at six o'clock the following morning and, under the guidance of Mr Vanderluys the Sabandar, we set off for our interview with Mr Vander Para, the General of the East India Company. The General's residence was a luxurious country house situated some 3 leagues distance from Batavia. When we met him we found him to be a polite and unpretentious individual. He received us with great conviviality and offered to obtain for us whatever we needed that was in his power to provide.

He gave us the impression of not being surprised or at all put out when we told him that we had called in at the Moluccas. He even went as far as to praise the conduct of the Resident at Boero for the kindness and assistance he had showed us. He gave his consent to my request that we send our sick crew members ashore into the Company hospital and immediately dispatched an instruction there saying that they were to be received.

Concerning our requirements for ships equipment; all we were required to do was to submit an order to the Sabandar and he would undertake to obtain for us everything we required. One of the perks of being the Sabandar is that he receives a commission, both from the purchaser and the supplier. When all these details had been concluded the General asked me if I would salute the Dutch flag; I replied that I would certainly do so on the condition that my salute be returned shot for shot. Nothing could be fairer than that he replied and appropriate instructions to this effect were immediately dispatched to the fortress. The moment I got back on board the ship I made a 15 gun salute to which the town of Batavia replied with the same number of guns.

That same day I sent all our sick men to the hospital ashore. Between the two ships this amounted to a total of 28 people. Some of them were still suffering the symptoms of scurvy, others, and this was the great majority, were suffering from a bloody flux. I set to work preparing a list of our requirements for the Sabandar's attention. This document included: ships biscuit, wine, flour, fresh meat and vegetables. I also requested that he arrange for our ships to be watered using the company's resources and to make arrangements for us to lodge in the town during our stay in Batavia. Normally accommodation here is provided in a beautiful large house that the Dutch call the *iner logment*. In this establishment accommodation and meals are provided at the rate of 2 *risdales* [Rix Dollars] per day. This charge however, does not include the provision of servants which, in our money, amounted to almost an additional pistole each day. This house belongs to the Dutch East India Company, but, its management is assigned to a private individual who has the exclusive right to board foreign visitors. This arrangement, however, was not available to the crews of Men-of-War. Consequently, the officers of the Etoile obtained for themselves accommodation in a house belonging to a private citizen. We also hired several carriages, the availability of which is absolutely indispensable in this large town, particularly as we were keen to visit the outlying regions; the surrounding countryside being, unquestionably, more beautiful than the town itself. These hired carriages have a place or two people and are drawn by two horses; the hire is a little more than 10 francs per day.

On the third day after we arrived, a group of us paid a ceremonial visit to the General; the Sabandar having previously given him notice of our intended arrival. He received us at another of his country

houses, named *Jacatra*; this place is situated only a third of the distance, from Batavia, of the house we had the first visited. I can make no better comparison, when describing the road that leads to it, than to say it greatly resembles many of the fine Paris boulevards, with the additional embellishment of canals of running water flanking it on either side.

We were supposed to have made other formal visits, all of which had been arranged by the Sabandar. These included: the Director General, the Chief Justice and the head of the Maritime Department. Unfortunately, Mr Vandersluys did not inform us of these arrangements and it was only the last of these that we did manage to get to see.

The title of this officer is *Scopen hagen*¹⁶⁸; although he has only the rank of Rear Admiral, within the company hierarchy, he has been elevated to the honorary rank of Vice Admiral by the Stathouder. The intention of this prince, in bestowing this honour, being to recognise the sacrifice that this distinguished gentleman had been required to make, him having been obliged to quit his position in the King's Navy, (where he had served with great distinction), to take up his present post here in Batavia.

The *Scopen hagen* is a member of the governing Council and, as such, he is responsible for all matters of a maritime nature. Additionally, he enjoys all the privileges of the Edel-heers, maintains an extensive household, lives in great style and compensates himself for the loss of all the discomforts, he formerly suffered at sea, by occupying a magnificent palace beyond the boundaries of the town.

Forms of entertainment to be found in Batavia.

During the time that we were in this town all of its well-to-do citizens went out of their way to make our stay here as enjoyable as possible. We attended great banquets in the town and in the countryside, we went to concerts, we took very agreeable walks, we enjoyed a great number of charming sights and experiences that, taken all together, were completely new to us. We were totally enchanted by the sight of this colossal entrepot where the richest and most extensive commerce in the world is conducted. But, even better in our view, was the spectacle produced by all these people of different races, each with its own particular culture, customs, manners and religion; all of them somehow moulded into a single society. Here was a community that was a joy to behold; here was something to instruct the traveller and even to be of interest to the philosopher.

There was also a playhouse which enjoyed an excellent reputation. We were able to judge it only by the quality of its architecture; we being unable to understand the language, and made a single visit sufficient to satisfy our curiosity.

We were, in fact, infinitely more anxious to see the Chinese theatre; while it is true we understood even less of that performance, it was, nonetheless, quite amusing. It is not however, an entertainment one would want to go along to watch every day! We thought, however, it was incumbent upon us that we went along to see all the various genres on offer.

Independent of the performances put on by the large theatres there was, at every crossroads in the Chinese quarter, a little stage set up upon which small plays and pantomimes were performed. In ancient Rome the citizens demanded they be given "bread and spectacles". The things the Chinese demand are tragedies and comedies. God be merciful and protect me from ever again having to listen to the outpourings of their actors and actresses. These are invariably accompanied by a crescendo of musical instruments. Their recitative, given in the most over-declamatory style, is to me the most

¹⁶⁸ The correct title is, in fact, Schout by Nacht, signifying, Rear Admiral.-JFF

ridiculous thing in the world; with the possible exception of the gestures they make. Besides, when I speak of their actors I am guilty of faulty terminology for, in the Chinese theatre, the roles of men are invariably played by women. But, it has to be admitted, I saw buffoonery enacted upon the Chinese stage that drew from the spectators an avalanche of applause than was no less enthusiastic than that which is enjoyed at the *Comedie Italienne* or at *Chez Nicholet*!

Beauty of the area around the town.

We could never grow weary of taking walks around and about in the town of Batavia. Neither could any European, no matter how accustomed he is to the great capital cities, fail to be astonished by the magnificence of the countryside on the outskirts of Batavia. The scenery has been enhanced by the addition of superb houses and gardens that have been created and are maintained with that taste and level of perfection that is the hallmark of all countries where the Dutch preside. I have no hesitation in saying that, for beauty and splendour, even our greatest French cities have been surpassed, even to the point of rivalling the magnificent surroundings of Paris itself.

Additionally, I must not forget to mention a monument that has been raised by private citizens in honour of the Muses. The Honourable Mr Mohr, the most senior churchman in Batavia, is having constructed in the garden of one of his houses an observatory that would do honour to any royal palace. He is a man who is as rich as Croesus and who is highly esteemed for his knowledge of, and taste for, all the sciences. This building, at this time not yet completed, has cost this gentleman an immense amount of money. What is even more inspiring is that, in addition to having provided this facility, he himself makes observations there. He has obtained, from Europe, instruments of every sort, and, of the most delicate kind, necessary for making observations; all of them at the cutting edge of technology. Furthermore, he is endowed with all the skills necessary to make proper use of them. This astronomer is, without any risk of contradiction, the richest of all the children of Uranus. He was delighted to see Mr Verron and proposed that he spent several nights with him in the observatory. Unfortunately there was not a single night when atmospheric conditions were conducive to making observations. Mr Mohr had observed the last passage of Venus and had sent the results of his observations to the Academy at Harlem. This data has since been used to determine the exact longitude of Batavia.

The central part of the town.

We would have considered that the inner part of the town; after having seen the magnificence of its surroundings, would be rather grander. Although it is a very fine city in many ways, it has few really splendid buildings. It is, however, well laid out and the houses therein are well built and comfortable. The town roads are wide and almost all of them have a canal which is bordered with trees running alongside it; this gives the place a charming and sequestered atmosphere. Nevertheless, it has to be said that the presence of these canals contributes greatly to the unhealthy level of humidity and that this makes a stay in Batavia a rather hazardous undertaking for Europeans.

Another hazard to health, in addition to the disagreeable climate, is the bad quality of the water here. Those who can afford it drink nothing but seltzer water; this they import at great expense from Holland. None of the roads are paved but at the side of every road there is a sort of raised esplanade constructed of dressed masonry or brick. The fastidiousness, inherent in the Dutch character, ensures that these pavements are maintained to the highest standard of cleanliness.

It is not my intention here to give a detailed description of the town of Batavia; others have done that many times already. Suffice it to say that one will retain a good idea of the nature of the town when one knows that it has been constructed in a manner reminiscent of the most beautiful cities of Holland. There is, however, one marked difference resulting from the fact that earthquakes here are not uncommon; and that is that the height of all buildings is limited to a single story. I will also refrain from describing the Chinese quarter which is outside the town; neither will I discuss the police who administer them, nor their habits and customs or the hundred and one aspects of life here that have already been described by other authors.

The wealth and luxurious lifestyle of the inhabitants.

One is immediately struck by the level of luxury that has been established in Batavia. The magnificence and good taste with which the interior of almost all the houses here have been decorated graphically indicates the awesome wealth of Batavia's inhabitants. Even so, we were informed; the level of munificence nowadays cannot hold a candle to what it was in former days. For several years now the Company has prohibited all private citizens in the East India Company from engaging in trade with India. This, in former times, had been a source of prodigious revenues. I make no judgement on this prohibition neither can I see what gain the company has obtained from it. All I know is that many people in the Company's employ possess the secret of knowing how to accumulate an annual income of 30, 40, 100 or even 200 thousand livres; this in addition to their normal salary which is perhaps 1500, 3000, or at the most, 6000 livres per annum. It is a fact that almost all the inhabitants of Batavia are employed by the Dutch East India Company. Nowadays it can be confirmed that the price of houses, both in the town and in the surrounding countryside, has increased by about two thirds of their former value. Batavia, however, will always be a rich town; the secret reasons for this I am now going to discuss. Those who have created wealth here find it extremely difficult to transfer their money to Europe. Principally, there is no system of transferring funds except via the company who make a charge for this service of 8% of the value of the cash to be transferred. This method, being so exorbitantly expensive, means that private persons are reluctant to make use of it and, so, the company gains little from its avarice. Additionally, it is impractical to try to bypass the Company's regulations, by sending funds secretly, because the local currency is of a particular type and loses 20% of its value when exchanged into European currencies. The Company makes use of the Emperor of Java's mint to produce this local currency and it is valid nowhere else but in the East Indies.

Details concerning the administration of the Company.

Nowhere else in the world are the citizens more constrained than they are here in Batavia. Every person is classified into a particular rank and each rank can be differentiated, one from the other, by unalterable exterior marks. All society in this place is compelled to conform to an etiquette that is enforced with greater severity than is the case in any other human institution of which I am aware. The various tiers of the administration are as follows: the Supreme Council, the Council of Justice, the churchmen, the Company's employees, the naval officers and, lastly, the military. The Supreme Council comprises: the presiding General, the Councillors of the Indies (who have been given the title *Edel-heer*), the president of the Council of Justice and of the *Scopen hagen*. These administrators meet together in the castle twice every week.

At the present time the Councillors of the Indies number 16, but, not all of them reside in Batavia. Some of them control the government at the Cape of Good Hope, Ceylon, the Coromandel Coast, the eastern region of Java, Macassar and Amboine; it is in these places, also, that they have their residences. These *Edel-heers* are given the prerogative to gild their personal coaches these, when they are driven out, are always preceded by two outriders; whereas, ordinary private citizens are entitled to only one. When a private carriage meets one of the *Edel-heer's* carriages abroad he must pull into the side of the road, stop and all the occupants must stand and wait until the *Edel-heer* has passed. The General himself, in addition to these privileges, is the only person permitted to have his carriage drawn by 6 horses. He is more often than not accompanied by a body of mounted guards, or, at least, some officers of the guard with several of his non-military staff. When the General passes all men and women are obliged to dismount from their vehicles. No carriages, with the exception of those belonging to the *Edel-heers* are permitted to approach the steps leading to his doorway and nobody, excepting them, is ever permitted to enter therein.

During our time in Batavia we encountered a considerable number of people who laughed behind their hands, as did we, at the ridiculousness of all this magnificent, but, pompous etiquette. The Council of Justice has absolute sovereignty, without right of appeal, over both civil and criminal law. Twenty years ago the General condemned to death one of the governors of Ceylon. This *Edel heer* was found guilty of committing acts of oppression during the course of his government. He was brought to Batavia and then executed in the square opposite the fortress. The appointment of the General of the Indies, the *Edel heers* and the Councillors of Justice is made in Europe. The General and the Ruling Council select and propose individuals to fill these senior positions, but, their choice is invariably ratified in Holland. The General himself however, selects and appoints all senior military personnel.

One of the most important and most advantageous positions is that of Country Commissioner (*Commissaire de la Campagne*). This officer is responsible for inspecting everything coming under the Company's administration on the island of Java. This extends even to the possessions and conduct of the various princes who govern there. He has complete control concerning the policing of all the Javanese citizenry subject to the Company's administration.

The police force is extremely strict, even crimes of a very minor nature are most severely punished. The forbearance of the long suffering Javanese, who put up with maltreatment bordering on being almost barbaric, is quite incredible. When one of them is executed however, he must be permitted to wear white trousers and, in the method of his execution, beheading is excluded. If the Company should deny this small act of compassion they know it would jeopardise their authority and, in all probability, the Javanese would rise up in arms against them. The reason for this is simple; according to the religion followed by the Javanese, should they arrive in Paradise either headless or without white trousers, entry would be refused them. They fervently believe that it is only while they are in this world that they can be subjected to despotism.

There is one other much sought after occupation, one that is without any disagreeable duties and attracts a very considerable remuneration. This is the position of Sabandar, or minister responsible for foreigners. There are two classes of them, one responsible for Christians and the other for pagans. The first of these classes has responsibilities for all European foreigners; the second manages all individuals of the various nations in the Indies, including those of the Chinese race.

Ranking of the various occupations employed by the Company.

These Sabandars are the brokers who handle all of Batavia's interior commerce and, at present, their number extends to more than 100,000. It is due largely to the work and care of these officials that the market at Batavia enjoys, as it has done for several years, such a large volume of trade. The other grades of employees, in ascending order of seniority, are as follows: Assistant, Book-Keeper, Under-Merchant, Merchant, Senior-Merchant and Governor. Each of these various civil grades has its own uniform and their grade corresponds to a military rank. For example, the rank of a major is equivalent to that of a Senior Merchant; a Captain, that of an Under-Merchant etc. etc. However, members of the military can never hold civil positions unless they first relinquish their military rank. Put simply, it is a maxim in the commercial world of the East India Company that the military have absolutely no influence. The military here are regarded as no more than a force to protect and strike at the company's enemies. This philosophy is carried to such an extreme that the entire military establishment here is composed solely of foreign mercenaries.

The various states controlled by the company on the island of Java.

The East India Company is the outright owner of a considerable area of the territory comprising the Isle of Java. The entire coastline on the north and the eastern side of Batavia belongs to the Company. Several years ago the company enlarged its holding by adding the Island of Maduré to its possessions. The former sovereign head of Maduré had revolted against the company and now his son has been appointed governor of that island where, formerly, his father had ruled.

The Company also profited, when the king there rebelled against the Company's rule, by taking possession of the beautiful province of Balimbuan, situated at the extreme eastern end of Java. This prince, a brother of the emperor, felt ashamed to be subject to the control of the Company's merchants. In his discontentment he was encouraged, or so it is rumoured, to rise up by the English. They had provided him with arms, gunpowder and had even constructed a fort for him. He had, therefor, decided that he was in a position to throw off the oppression's yoke. The resulting war only came to an end two months before our arrival in Batavia. This uprising had been very difficult to suppress, and, over a period of two years, had cost the Company a great deal of money.

The Dutch had been bested in the first battle, but, during the second engagement, the Prince along with his entire family had been captured and taken to the fortress in Batavia where he died shortly afterwards. His sons and all the other members of his unfortunate family were put aboard the next available vessels to leave Batavia and were taken to the Cape of Good Hope where they ended their days immured on Robben Island.

Formerly, the only islands considered to comprise the Moluccas were the several small islands straddling the equator between 15' south and 50' north latitude and lying adjacent to the western coastline of Gilolo. The most significant amongst these islands are: Ternate, Tidore, Mothier, Mothir, Machian and Bachian. Over time the name has, additionally, been applied to many of the other islands where spices are produced. Banda, Amboine, Ceram, Bouro and all the adjacent islands have come to be included within the group of islands known as the Moluccas. Some people have even tried to include, but without any success, the islands of Bouton and Celebes. The Dutch have divided up these lands, which they have given the title "Oriental Countries", into four separate administrative areas which take their instructions from and report to the Central Government located in Batavia. These four locations are Amboine, Banda, Ternate and Macassar.

The government at Amboine.

The Amboine administrative area is governed by an Edel-heer; in this region 6 factories have been established which are distributed: on the island of Amboine itself, on Larique, (where the manager is of the merchant grade), and on Hila, (where there is an Under Merchant). To the west of the Isle of Amboine lie the islands Manipa and Boero. Managing the first of these there is only a Book Keeper, but, on the other Hendrik Ouman, who is an Under-Merchant, resides. He is the man who was of such great help to us during the time we spent there. On the tiny island of Haroeko, almost exactly due south-east of Amboine, an Under Merchant holds sway. Finally, on Saparoea, an island also lying to the south-east of, and about 15 leagues from, Amboine, a Merchant is established. He also has authority over a little island called Neeslaw, where a Sergeant with a detachment of 15 soldiers is maintained. At the island of Saparoea there is an excellent anchorage in a fine bay. Here a small fort has been built on an elevated rock. On this island, and also upon Neeslaw, crops of cloves are produced in quantity sufficient to provide a complete ship's cargo. The entire military force in the Amboine region amounts to 550 soldiers under the orders of a Captain, a Lieutenant and 5 Ensigns. In addition there are 2 Artillery Officers and an Engineer.

The government of Banda.

The government establishment at Banda is greater than that of Amboine. The island is better fortified and its garrison of soldiers more numerous, comprising, as it does, some 300 soldiers under the command of a Captain First Class, a Captain Second Class, 2 Lieutenants, 4 Ensigns and an Artillery Officer. This garrison, in the same manner as do those of Amboine and the other principal islands, provides troops for detached duties.

Gaining entry into the Banda anchorage is extremely difficult for those not familiar with it. Ships must keep in close to Gunongapi Mountain, upon which a fort is situated; while at the same time taking care to avoid a rocky bank by leaving it on the port-hand side. The passage is no more than 1 mile wide, but, even so, no bottom is found when soundings are taken. Next it is necessary follow the line of the bank and to take soundings until the anchorage, in 8 to 10 fathoms at the foot of London Fort, is reached. This anchorage can accommodate 6 or 7 vessels.

There are 3 posts established in this area, all of them dependent upon the government of Banda. At Ouriën there is a bookkeeper, at Wayer resides an Under Merchant, and upon the island Pulo Ry en Rhun a Senior Merchant is in charge. This island, which is adjacent to Banda, is exclusively dedicated to the production of nutmeg; however, the Company also gathers pearls at this place. A fort has been constructed here and there is an anchorage which is suitable only for sloops. Ships anchoring here must do so outside the bank and so are prevented from approaching the fort. It would be necessary, if one were to launch an attack upon this place, to bombard it under sail for the depth of water outside the bank is very great. There is no water to be found on this island, consequently, in order to supply their garrison there; water has to be imported from Banda. I also believe that Arrow Island is included within this administrative area. On the island only a small staff is established; this includes a sergeant and 15 soldiers.

Administration of the islands of Timor and Solor, even though they are quite close, is quite different. They are controlled directly from Batavia. These islands produce sandalwood. Strangely enough the Portuguese also maintain an outpost on Timor, but, and even more astonishingly, they made little use of it.

The government of Ternate.

Ternate has 4 principal dependent outposts, they are: Gorontalo, Manado, Limbotto and Xullabessie. The resident managers of the first two are graded as Under Merchants whilst the other two are only bookkeepers. Additionally, there are some smaller outposts where only a sergeant is in charge. The total complement for the entire Ternate area is 150 men under the command of a Captain, a Lieutenant, 9 Ensigns and an Artillery Officer.

The Government of Macassar.

The government of Macassar, in the Celebes Islands, is overseen by an Edel-Heer who has in his department 4 factories: Boeacomba en Bonthain, Bima (where there are 2 under-merchants), Selayar and Maros (where at each there is a resident book-keeper). Maccassa, which is also known as Jonpandam, is the most strongly fortified place in the Moluccas; nevertheless, the local inhabitants still manage to keep the Dutch confined within the limits of their outpost. The garrison here consists of 300 soldiers commanded by a Captain first class, a Captain second class, 2 Lieutenants and 7 Ensigns. In addition, there is an Artillery Officer.

There are no spices grown in the region of this local government, that is, unless some are produced at Bouton; but, I have not been able to determine what the true situation is. The principal object of the establishment here is to control and safeguard the passage that gives access to the profitable commercial centres in the Celebes and Borneo. This channel is amongst the most important in the Moluccas. In these two great Islands the Dutch produce gold, silk, cotton, valuable timber and even diamonds. In exchange for these the Dutch provide iron, textiles and other goods of European or Indian manufacture.

The Dutch political philosophy in the Moluccas.

The details that I have given, concerning the different establishments occupied by the Dutch in the Moluccas, paints a fairly accurate picture of the situation here. This system, which has been established to ensure law and order, is a tribute to the obviously far seeing officials at the head of the government. At the time when the Dutch evicted the Spanish and Portuguese, (this in itself was an operation whose success resulted from astute planning, patience and courage), they were intelligent enough to see that it was not sufficient to rely exclusively on trade in spices or to exclude all Europeans other than themselves from the region. In any case, the vast number of islands made the maintenance of an effective guard impossible. Any attempt to prevent smuggling between the local people and China, the Philippines, Maccassa and whatever foreign vessels take upon themselves to trade illegally, was also totally impractical.

Principal amongst the Company's concerns is that specimens of trees and shrubs might be taken and established in other localities. Their solution, on a great number of the islands, is to destroy as many of the spice producing plants as they could, allowing them to flourish only on certain of the smaller islands where they are easier to guard. The reduction in the number of spice producing localities makes these profitable establishments much easier to fortify.

It has thus become necessary to gain control over the rulers of those islands where the principal source of income have been obliterated. Then they set about ensuring these rulers continued to support the suppression of all future spice production. Their agreement came not without a cost and

the Dutch East India Company is obliged to pay to the kingdom of Ternate, and, to several other princes in the Moluccas, an annual subsidy of 20,000 rix dollars.

In those locations where the reigning monarch's consent to the suppression of spice production could not be obtained; the Dutch, when they were in a strong enough position to do so, eradicated it anyway, by force. Elsewhere, it is their policy to purchase the still green leaves of the plants every year; they being aware, as the local people were not, that within 3 years the plants cropped in this manner would wither and die.

By means of these policies they insured that Ceylon became the sole location for the production of cinnamon, the Banda Islands for that of nutmeg while Amboine and Uleaster alone produce cloves. Cultivation of any other than the approved species, at any of these islands, is strictly curtailed.

Despite this artificial limitation of cropping; these locations are capable of producing more of these spices than is needed to satisfy the demand of the entire world.

All the other posts, established by the Dutch, have but 2 purposes: (a) to prevent all other nations gaining a foothold that would enable them to commence spice production; (b) constant surveillance to ensure any surviving spice plants are immediately and effectively destroyed.

When engineers or seamen in the employee of the company take their retirement they are obliged to hand over any maps or plans in their possession, further; they are required to take an oath that they have retained none. Not so very long ago some residents of Batavia had been whipped and then banished to an almost deserted island for having showed a map of the Moluccas to an Englishman. The spice harvest begins in December and the ships destined to carry it into Europe arrive at Amboine and Banda during the course of January. From these places they set out to Batavia during April and May. Every other year vessels come into Ternate where their arrivals and departures are dictated by the prevailing monsoon. Additionally, in the region there are several snaws, of 12 or 14 cannon, whose duty it is to patrol the waters hereabouts.

Every year, towards the middle of September, the governors of Amboine and Banda call all the Orencaies (the department heads) to an assembly and, during the course of several days, a great festival is held with much feasting and entertainment. Following this celebration they embark in large ships, known as Coracores, in order to make a tour of their dominions and to burn any surplus to requirement spice plants. The resident managers at the factories are particularly required to present themselves to the Governor Generals and to accompany them during the course of this annual tour. This voyage of inspection is ordinarily completed by the end of October or the beginning of November; at which time yet more celebrations are held. During the time we spent in Boero, Mr Ouman was making preparations to leave for Amboine accompanied by the Orencaies of his own island.

At the present time the Dutch are at war with the inhabitants of Ceram, an island where cloves are produced in abundance. The Ceramese, who have no wish to see their plants destroyed, have been successful in driving the Dutch from their region and shutting down all the Dutch factories, with the exception of one small establishment at Savai. This single outpost is situated in the northern part of the island and has an establishment comprising a sergeant and 15 soldiers.

The Ceramese are in possession of firearms and gunpowder. The entire population, in addition to their own national dialect, is fluent in the Malay language. The population of Papua is also in a continual state of war with the Dutch East India Company and its shipping. These people are in possession of warships armed with pederos,¹⁶⁹ which are manned by a crew of some 200 men.

¹⁶⁹ A pederos is an ancient type of cannon designed to throw stone shot. -JFF

The king of the Island of Salviati, one of the largest islands in the Papua group, was recently taken by surprise and arrested in an ambush while he was on his way to pay homage to the king of Ternate; a kingdom of which he is a vassal. To this day he languishes in a Dutch prison.

What policy, other than the one we have set out above, could be better contrived? What more effective measures could be taken to ensure the East India Company enjoys exclusive benefit of this lucrative trade, this market they have monopolised for so many years? The state of splendour that its exclusivity allows them to enjoy makes it seem more like a powerful republic than a mercantile organisation. However, unless I am very much mistaken, pride, going as it does before a fall, it will not be very long before this trading organisation is subjected to a cataclysmic shock the severity of which will threaten its very existence. I will go as far to say that if any existing power possessed the will to destroy this exclusive trade, then its annihilation would be as good as certain.

The greatest safeguard the Dutch have lies in the ignorance, existing in other European countries, of what is the true state of affairs in these islands. Over this garden of the Hesperides there hangs an impenetrable and a mysterious cloud of ignorance shielding it from the rest of the civilised world's perception.

There are some difficulties, however, that the wit of man cannot overcome and some adverse circumstances that even the wisest counsels cannot circumscribe. The Dutch may build here the most robust fortifications; they may garrison them with a prodigious numbers of troops; but, it will not be very long before these defences are thrown to the ground by the earthquakes which occur in this region at very frequent intervals. In addition to such geological cataclysms, the dreadfully unhealthy climate pertaining in this region ultimately carries off in excess of two thirds of the personnel the Dutch send here. Against the pestilential nature of the climate in this region no remedy has yet been found. The forts on the island of Banda, which were destroyed in an earthquake three years ago, have only recently been rebuilt. Those on Amboine still remain in a totally ruined condition.

While it is true that the Company have successfully destroyed a part of the known spice crop in some of the islands; at other locations they have not been so successful. This is either because they are unaware that spice cultivation is being carried on, or, it results from the indigenous population being robust enough to thwart their attempts.

Nowadays many English ships regularly visit the region of the Moluccas Islands and, without a doubt; they have designs on cutting out for themselves a slice of the lucrative spice trade. Several years ago a number of small ships, out of Bancoul, came into this region with the purpose of reconnoitring the passages and making themselves familiar with the complex navigation in the region. As I stated earlier, the inhabitants of Bouton informed us that 3 English ships had recently taken passage through this strait and that they had given assistance to the unfortunate king of Balimbuam.

To us, it appears almost certain that it is the English who are supplying the Ceramese with gunpowder and armaments. There is no doubt that they built a fort for them and equipped it with two cannon. It is reported, however, that this fort has since been destroyed by Captain le Clerc. In 1764 one Mr Watson, commander of the 26 gun frigate the Kinsberg, appeared at the approaches to Savai and, by threatening to fire upon the town, obtained the services of a pilot to guide him to a safe anchorage. Whilst Watson was in the location he committed many acts of aggression against the almost defenceless Dutch establishments located there. He then went to Papua where he unsuccessfully attempted to pillage the factory. During this abortive mission one of the Kinsberg's small boats, under

the command of the son of Lord Sandwich (at the time he was a midshipman)¹⁷⁰, was captured by the local natives and the entire crew of Europeans were made prisoner. These unfortunate men were then lashed to stakes set into the ground where they were circumcised and subsequently tortured to death. It would appear that the English have made no attempt whatsoever to conceal their activities from the Dutch East India Company. Four years ago they established an outpost in one of the islands of the Papua group bearing the name Soloc or Tafara. Mr Dalrymple,¹⁷¹ who originally set up this establishment, also became its first governor. However, the English remained in this place for only 3 years and have recently abandoning it. Mr Dalrymple moved onto Batavia in the year 1768 aboard the vessel *Patty*, (Captain Dodwell). Subsequently the *Patty* sailed for Bancoul where she sank in the outer harbour. The outpost at Bancoul is a centre for the production of: bird's nests, mother of pearl, ivory, pearls and sea cucumbers (holothuroidea), to which the Chinese are very partial¹⁷². What I find quite extraordinary is the fact that the English bring whatever cargoes they acquire to Batavia where they sell them. This is an activity which I know to be certainly true, as I learned of it from the merchant in Batavia with whom they do business.

This same merchant also informed me that the English also obtain supplies of spices at the island of Soloc; perhaps this trade is in collaboration with the Ceramese. Why the English ultimately abandoned the place I do not know. One possibility is that they have obtained sufficient spice plants and gained all the knowledge they need, with regard to their culture, as to be confident of success and have now established spice production at one of their colonies in the Indies. Such an action would, of course, leave them free to shut down an outpost that was both expensive to maintain and a red rag in the face of the Dutch.

While we were in Batavia we obtained news concerning several of the ships, the presence of which we had heard about several times during our voyage. Mr Wallace had arrived here in January 1768 and had left again almost immediately. Mr Carteret had, unintentionally, becomes separated from the vessel commanding the expedition shortly after emerging from the Magellan Strait and had, subsequently, made a long, complicated and event-filled voyage. He had arrived in Macassar at the end of March of the same year. He had suffered the loss of most of his crew and his ship was reduced to a state of extreme disrepair. The Dutch, not wishing him to stop over at Jompandam, had sent him on to Bontain. They had with great reluctance allowed him to take on board several local seamen to replace those members of his crew who had died. He remained in one of the Celebes Islands for 2 months and then made a passage to Batavia where he arrived on 3rd of June.

At Batavia he was able to careen his ship and make her ready to continue the voyage, which he did on 15 September; that is to say only 12 days after he had arrived. While he was in Batavia Mr Carteret spoke but little concerning the voyage he had made. He was, however; extremely voluble in making known the details of an action against local tribesmen that had taken place in the strait he had named the St. George's Strait. He was able to display arrows, several of which had wounded members of his crew, including his second-in-command. This officer was still suffering the effects of his wounds at when they left Batavia.

¹⁷⁰ De Bougainville is mistaken; the son of Lord Sandwich was not involved. -JFF

¹⁷¹ de Bougainville has been misinformed, Dalrymple was not at this location during this period. - JFF

¹⁷² de Bougainville calls them *Tripans* or *swallopps*.

October 1768.

Illnesses contracted while we were in Batavia.

We had been in Batavia no more than 8 or 10 days when the first symptoms of illness started to appear amongst the crew. From being in a state of perfect health and robust appearance, men passed to the grave within a space of 3 days. Several amongst us contracted violent fevers which failed to respond even to the care administered in the hospital. I made every effort to complete all the activities that were necessary to prepare the ship for sea as quickly as possible. Unfortunately, our sabander had been taken ill and was unable to assist us in expediting our various activities. As a consequence we experienced difficulties and delays. It was, in fact, not until 16th October that we were in a fit state to depart. But, then, without further delay, we hoisted sails and moved out and anchored in the outer harbour.

The Etoile had been unable to obtain supplies of biscuit until that date, but, she finally embarked her stores during the night and was at last ready for sea. The very moment the wind was suitable she too came out and moored alongside us. All the officers aboard the Boudeuse were either seriously ill or exhibiting symptoms that we knew to be the harbinger of serious sickness.

The number of cases of dysentery amongst the crew had not diminished; our extended stay in Batavia had caused greater ravages amongst the ship's company than had all the other months of our entire voyage put together.

Our Tahitian, whose enthusiasm for everything new that he saw, had, without a doubt, preserved him up until this time from the pernicious effects of this dreadful climate, did finally succumb and was seriously ill for a very long time. The docility and fortitude with which he tolerated the treatment prescribed was worthy of any man born in Paris. Nevertheless, he subsequently never spoke of Batavia without referring to it as the land that kills - *enoua mate*.

CHAPTER IX

Departure from Batavia; a call at l'Ile de France (Mauritius); return to France.

On 16 October the Boudeuse, unaccompanied by the Etoile, set sail from Batavia's outer harbour and anchored about 2 leagues beyond it in $7\frac{1}{2}$ fathoms on a bottom of soft mud. My position was thus about half a mile to the West $\frac{1}{4}$ North W of the beacon one is required to leave to starboard when entering Batavia. Edam Island bore North NE 4° East at a distance of 3 leagues; Onrust Island, to the North W $\frac{1}{4}$ West, was at a distance of $2\frac{2}{3}$ leagues; Rotterdam Island bore North 2° West, at a distance of $1\frac{1}{2}$ leagues. The Etoile, who had been unable to obtain her bread until later that day, finally got underway at three o'clock in the morning and, steering by the lights I kept lit to guide her, she too came out and moored close to us.

Details concerning the route that one must follow to come out of Batavia.

Because the route one must follow to come out of Batavia has certain points of interest I give myself here the liberty of describing how we managed it. By five o'clock in the morning on 17 October we already had all our sails set; we then steered North $\frac{1}{4}$ N East in order to pass $1\frac{1}{2}$ leagues to the east of Rotterdam Island; we then turned on to a course North E $\frac{1}{4}$ East in order to pass to the south of Horn and de Halem Islands and, after that, West $\frac{1}{4}$ N West and West $\frac{1}{4}$ S West in order to follow the coastline of the islands of Amsterdam and Middleburg, (upon which there is a flagpole). We then sailed due west leaving the beacon situated on the south side of the Little Cambuis Island on our starboard hand.

At noon we made an observation which made our latitude $5^{\circ} 55'$ south; at this time we were on the line passing north-south through the south-easterly point of the Greater Cambuis Island (which lay about a mile distant from us). From that position I set a course in order to pass between two beacons, one of them placed to the south of the north-west point of the Greater Cambuis Island and, the other, on a line east-west from Cannibal Island (*l'Ile des Antropophages*) (which is otherwise known as Pulo Laki). After that one follows the coastline at whatever distance offshore is convenient. By half past five the current had started to push us towards the coastline and as a consequence I moored on a single kedge-anchor in 11 fathoms of water on a muddy bottom. The north-easterly point of Bantam Bay was bearing West $\frac{1}{4}$ N West 2° West, at a distance of about 5 leagues and the central point of Pulo Baby bore North W 5° West, some 3 leagues off.

There is, however, an alternative route that can be taken when leaving Batavia. It is possible, after coming from the outer harbour, to follow the coastline of Java leaving a wooden buoy, (situated about $2\frac{1}{2}$ leagues from the town itself) which serves as a beacon, on the port hand side. After that one follows the southern coastline of Keper Island to pass between 2 beacons, one of them on the southern side of Middleburg Island, the other opposite it on a sand bank extending from a point on the mainland. After that one comes up to the beacon on the south side of Little Cambuis Island. From this point on the route is exactly the same as the first one, mentioned above. The chart I have prepared concerning methods of departing from Batavia gives precise details of both these routes.

Making an exit of the Sunda Strait.

At two o'clock in the morning of the 18th we were already under sail but by evening we were compelled to anchor. It was not until the afternoon of the 19th that we made our exit from the Sunda Strait by passing to the north of Princes Island. The midday observation put our latitude as 6° 30' south and by four o'clock that afternoon we were about 4 leagues from the north-westerly point of Princes Island. I took as my point of departure a position 6° 21' south and 102° east of Paris; as indicated on the chart of Mr d'Après.

As one progresses there are many locations on the Java coastline which provide convenient anchorages. In several places along this part of the coast the Dutch have established outposts. Each of them is under orders to send a soldier out to every passing ship and to enter the name of the vessel, where it has come from and where it is bound, into a register. What information one chooses to enter into this register is up to each individual ship's captain. For myself however, I can see no harm in this procedure since it is a system by which one can obtain news of the movements of ships that otherwise might be thought to have got into some difficulty or other. Additionally, the soldier who brings out this register also brings with him poultry, turtles and other refreshments for sale to the ship's crew. At this time of our voyage all the members of the two ship's crews were free from scurvy. Several however, were afflicted with a bloody flux and for this reason I decided to sail immediately for the Ile de France, without waiting for the Etoile. Accordingly, on the 20th I signalled our consort informing her of my intentions.

Passage to the Ile de France¹⁷³.

During the course of the run we made from Batavia to the Ile de France nothing occurred worthy of particular mention other than that this part of our voyage seemed to pass very quickly and pleasantly due to the favourable winds and excellent weather we fortunately experienced. We were blessed with a constant and very fresh wind from the south-east. We were in great need of this good fortune for the number of the sick amongst the ship's company grew more numerous by the day. Those whose symptoms did begin to ameliorate, recovered only but slowly and required a long period of convalescence. In addition to the bloody flux I have mentioned previously, raging fevers began to manifest themselves. It was one of these fevers that carried off one of our shipwrights on the night of the 30th – 31st. The state of our rigging was a grave cause of concern to me. There was good reason to fear the failure of the main mast 5 or 6 feet below the catharpins. I gave instructions for the weakened section of the mast to be fished and, in order to reduce the strain on it, had the top gallant mast brought down. As an additional precaution we sailed with the mainsail double reefed.

1768. November.

We sight Rodrigues Island

Unfortunately, these very necessary precautions had the effect of slowing our progress considerably, but, in spite of this, on the 18th day after leaving Batavia, we raised Rodrigues Island and the day after that the Ile-de-France. At four o'clock in the evening of 5th November our position was on a line north-south from the north-easterly point of Rodrigues Island and I was able to establish that a

¹⁷³ Now called Mauritius.-JFF

discrepancy had occurred between our estimated and our actual position during the passage between Princes Island and Rodrigues Island. Mr Pingré had, by observation, calculated our latitude to be 60° 52' east of Paris. At four o'clock I had estimated my position as 61° 26' (based on the assumption that the bearing I had taken of some habitation located on Rodrigues Island had been made while 2' to the west of the point I had been north-south of at 4 o'clock). Thus, according to my calculation, the difference that had occurred over a distance of 1200 leagues was 34' astern of the ship while the observations made by Mr Vernon, on the third of the month, showed difference of 1° 12' ahead of the ship.

Our landfall at the Ile-de-France.

At midday on the 7th we sighted Ronde Island and by five o'clock that evening our position was on a north-south line from the central point of the island. As night began to fall we fired off some cannon in the expectation that the beacons on Cannoneers Point would be illuminated in response. However, these guiding lights, referred to by Mr d'Après, remained unlit. The result of this was that, after I had doubled the Coin de Mire (which one can sail as close to one wishes), I found myself in the exceedingly embarrassing position of not being certain if I would be able to clear the rocky ledge which extends from Cannoneers Point. I went about in order to put myself to windward of the port and from time to time fired a cannon. Finally, between 11 o'clock and midnight, one of the pilots who are established on this island, by the Kings pleasure, came aboard us.

The frigate faces a danger.

It was at this point, having considered my difficulties to be at an end and having handed over the con of the ship to the pilots, that at half past three o'clock the pilot almost ran us aground in the vicinity of Tombstone Bay. Fortunately, there was not a heavy sea running and the manoeuvre we instantly made in order to draw us off toward the open sea was successful. It is easy to imagine what a painful calamity it would have been for us, if, having faced so many previous dangers and having brought ourselves safely through them, we had been wrecked as a result of the incompetence of an ignoramus whose services, by law, we had been obliged to make use of. As it was, we emerged, from this extremely hazardous incident, losing nothing more than 45 feet of our false keel; it had been shorn away when we grazed across the seabed.

Nautical advice.

Reflecting on this accident, having avoided becoming victims of it only by the skin of our teeth, puts into my mind the need to make the following observation. Those navigators wishing to enter into the harbour at Ile de France should make sure that they allow themselves sufficient time to gain the harbour entrance during the hours of daylight and, at the same time, not to come in too close to the coastline. When arriving off the port and it is the case that darkness will occur before it is possible to gain the harbour, one should haul off for the night to a position windward of Ronde Island and then, on account of the currents, instead of lying-to, continue plying steadily to windward under a good spread of canvas. There is, however, the option of an anchorage lying between 2 small islands where we sounded 30 and 25 fathoms on a sandy bottom. However, it is my opinion that this anchorage should remain the choice of last resort.

Our stopover at Mauritius (Ile de France).

On the morning of the 8th we entered into the harbour and spent the remainder of the day mooring ship. At six o'clock that evening the Etoile appeared but was unable to enter harbour until the following day.

It was on this day that we realised that our calculation of the date was in error by a complete day and consequently we adjusted our calendar to fit our reckoning into agreement with that of the rest of the world!

Details of activities at Mauritius.

On the first day in harbour we sent all the sick members of the crew into the hospital ashore. I compiled a list of our requirements for both victuals and ships stores and without delay we set to work preparing to careen the ship. I requisitioned all the workers the port was able to make available to me and, additionally, some of the crew members from the Etoile. I had made up my mind that we would sail from here the moment the ship was ready. During the course of the 16th and 17th we beamed the frigate. During the course of this activity we found that her outer sheathing was badly worm-eaten, notwithstanding this decay, however, her main planking remained as sound as the day she had come from the dockyard. We found it necessary to replace certain elements of the ship's masts. The heel of our main mast, which had previously been fished, we thought likely to fail at any time. Additionally, somewhat higher up, a defect had developed in the central section of this same composite mast. The yard was able to provide me with a replacement one-piece main mast, two top masts, several anchors, some cables and an amount of small diameter cordage, stuff of which we were in the greatest need. I transferred into the king's magazine all my old provisions and took on board fresh stores enough for 5 months duration. I also transferred into the care of Mr Poivre, the dockyard superintendent: all the iron and nails that had been embarked in the Etoile, the fresh water still, my cupping glass, a large quantity of medicines and a number of items of which we would no longer have any use during the remainder of our voyage, but, which would be of the greatest benefit to the population of this colony.

I also transferred into the garrison 23 of our soldiers who had expressed the wish to remain at the Ile de France. Mr Commerçon and Mr Verron also agreed to postpone their return to France; the first of them in order to study the natural history of these islands and of Madagascar; the other that he be better located for undertaking a journey to India in order to observe the predicted passage of Venus. I was also requested to leave behind: the engineer (Mr Romainville), several young volunteers and some of the junior pilots in order to assist with the navigation on the Indian subcontinent.

The loss of two officers.

We were extremely pleased that we were still in the fortunate position, after having made such a long voyage, of being able to provide personnel and equipment that would be of great benefit to this colony. Unfortunately, however, this joyful feeling was soon to be cruelly set to naught by the death of sub-lieutenant, the Chevalier de Bouchage. He was an officer of great merit; he brought together within the frame of a single person the knowledge and wisdom inherent in an experienced sea officer with all the personal attributes of character that cause a man to be much valued by his friends. Despite all the care and skill Mr de la Porte, our surgeon, expended in an attempt to save his life, he died in my

arms on 19th November as the result of the dysentery that had struck him down while we were in Batavia. Only a few days afterwards the young son of Mr le Moyne, who was a *Commissaire Ordonnateur de la Marine*¹⁷⁴, only recently appointed *Garde de la Marine*¹⁷⁵, died as a result of respiratory failure.

I was in great admiration of the situation at Ile-de-France where, by this time, Messrs de Rosting & Hermans had already established their forges; even in Europe there are few as advanced as these. The iron they manufacture is of the highest quality. It is difficult to comprehend how much perseverance and skill has been required in order to bring this establishment up to its current state of perfection; nor how much it has cost. On this island there are now 900 Negroes and from amongst them Mr Hermans has selected 200 to form a regiment; this body of men has already established an *esprit de corps* of its own. The leaders of this regiment are extremely careful whom they choose to be their comrades, they refuse to admit any who have been guilty of even the most minor offence. Here we see an excellent example whereby, even amongst slaves,¹⁷⁶ a sense of honour established.

1768 December.

During the time we spent here we enjoyed the most splendid weather. However, on 5 December the sky started to fill with immense clouds and the mountains became all enveloped in a dense fog. These metrological conditions announced the imminent arrival of the wet season and also the stormy conditions that occur in the region of these islands every year.

Our departure from the Ile-de-France.

By the 10th of the month we were ready to set sail but, strong winds accompanied by heavy rain made our departure impossible until the morning of the 12th. We sailed alone because the Etoile was being careened and would not be ready to sail before the end of the month. Besides, from this point in time there was no reason for the two ships to sail in company. This store ship, which sailed from the Ile-de-France at the end of the month of December, arrived back in France a month after we did.

¹⁷⁴ An officer invested with administrative power to superintend the building, fitting out and repair of ships. - JFF

¹⁷⁵ A Controller of naval stores. - JFF

¹⁷⁶ John Forster, in his translation, added the following footnote. I thought its inclusion here would illustrate what Anglo-French relations were like, at the time!
We are very ready to do justice to Mr. Bougainville, when he presents us with a new and interesting observation; but when he, without the least necessity, becomes the advocate of tyranny and oppression, we cannot let these sentiments pass unnoticed. It would have appeared to us impossible, that such an idea as this could enter into any man's head who is in his right senses: he wrote down this strange assertion, either being carried away by the itch to say something extraordinary and paradoxical, or in order to make slavery more tolerable to his fellow Frenchmen--Slavery endeavours to extirpate and to smother all sentiments of honour, which only can operate in the breast of a really free man; true honour, therefore, and slavery, are in direct opposition, and can be combined as little as fire and water. If Mr. B. threw this sentence out, in order to alleviate the yoke of tyranny his country groans under, we think we could excuse it in some measure, as he would then act from principles of humanity. But if the irresistible desire of saying something new was the prevalent motive with him, it has much the appearance as if he were willing to insult the poor victims of despotism. The generous and amiable character which M. B. from other instances appears in, prompts us to wish, that this sentence had been omitted by him.

At noon I took my point of departure at the southern observed latitude of 20° 22' and by 54° 40' of longitude east of Paris.

The passage until we arrived at the Cape of Good Hope.

At the start of this run the sky was overcast with frequent rain and squalls so that we were unable to sight the Ile de Bourbon. However, as we drew further away from the Ile de France the weather improved considerably and we experienced a fresh and favourable wind. Soon however, our new main-mast started to cause us the same concerns as its predecessor had. The truck of this mast moved in an arc so considerable that I was restrained from using my top-gallant sails and could only deploy partially hoisted top-sails.

We are beset by stormy weather.

From 22 December until 8 January we constantly suffered either: severe headwinds, foul weather or periods of dead calm. These Westerlies, I was later informed, had never previously been experienced at this season in this location. We were molested by them for a full 15 days; during which time we were either hove-to or we spent in beating to windward in the face of a fully arisen sea. We sighted the coast of Africa even before we had obtained a sounding. At the time we first saw this land, which we took to be the Cape of Shoals (*le Cap des Basses*), we had as yet found no bottom. On the 30th we obtained a sounding of 78 fathoms; from that day on we were over the Aiuilhas Bank and almost always within sight of land.

1769. January.

It was not very long before we came upon several Dutch vessels belonging to the Batavia fleet. The ship in the van of this fleet had left Batavia on 20th October; the others not until 6th November. The Dutch were equally as surprised as we to be experiencing these most unseasonal westerly winds. Finally, on the morning of the 8th January, we sighted False Cape and, a short time afterwards, the land comprising the Cape of Good Hope. I observed, and carefully noted, that at a distance of 5 leagues to the East S East of False Cape there is an extremely dangerous submerged rock. I noted, also that, to the east of the Cape of Good Hope, there lies a reef protruding into the offing for a distance of $\frac{1}{3}$ league and at the foot of this same cape there is a rock positioned at the same distance offshore. I had by now come up to the Dutch vessel we had first sighted during the morning and I reduced the amount of sail we were carrying in order that we might not pass her and so follow her if she decided to make a night entrance. At seven o'clock that evening she took in her top-gallant, studding and even her top-sails. On observing the action she was taking, I decided to stand out to sea and then spend the night tacking back and forth in the good fresh breeze that varied between south, South S East and South S West.

By dawn the next day we found that the prevailing current had carried us almost 9 leagues to the West N West and that the Dutch ship was now more than 4 miles downwind of us. Thus, we were obliged to crowd on sail in order to make up the ground we had lost. It should also be noted that those who are obliged to spend the night on their boards, with the intention of entering Cape Bay in the morning, would do well to keep at a distance of about 3 leagues from the shore when traversing the easterly point of Cape Bay. This is because from this location the currents will put the vessel in a good position to make an entrance during the following morning.

At nine o'clock in the morning we anchored in Cape Bay at the head of the roadstead where we laid out moorings on a North N East and South S West line. With us in the Anchorage where 14 other great ships belonging to several nations and during the time we spent here several others made their entrances. It was from this port that Captain Carteret had made his departure on Epiphany Day. We fired a 15 gun salute to the town to which they responded with an equal number.

Our Stay at the Cape of Good Hope.

We had every good reason to praise the governor and the inhabitants of the Cape of Good Hope; they made every effort to obtain for us not only those things that were of practical value but also items that would please us. I will not here make a detailed description of this place for it is now well known to everyone in the world. The Cape is directly and closely linked to Europe and is not dependent on Batavia either for its civil or its military administration; nor are its administrators appointed from that place. The truth is, in fact, that if one has been appointed to a post at the Cape, one is automatically excluded from gaining one at Batavia. Nevertheless, the Cape administrators correspond with Batavia concerning matters of trade. The council here is composed of 8 persons, one whom is the governor who acts as the president. The governor is not concerned with the day-to-day affairs of the Department of Justice; that business is presided over his second-in-command. The governor does however, sign death warrants.

There is a military detachment maintained at False Bay and another at Saldanha (*Saldagne*) Bay. This last place is a superb harbour sheltered from winds from every direction; the only reason it was not chosen as the capital is because it lacks an adequate water supply. At the moment work is in progress to improve and increase the facilities at False Bay for it is here that ships moor during the winter period when the anchorage in Cape Bay is prohibited by the weather. In False Bay the level of support is in every way comparable to that at Cape Bay and is to be obtained at an equally modest cost. The two establishments are linked by an 8 league long road which is in the most dreadful condition.

Information concerning the wine producing region of Constance.

Almost exactly halfway between the above two sites stands the region of Constance; here is produced a famous wine which bears the region's name. At this vineyard the cultivar is a Spanish Muscat vine. There is currently a rumour that this quite small vinery belongs to the Company, is surrounded by walls and is closely guarded. Both suppositions are quite false. The place is divided by a hedge into two parts. One of them, known as Upper Constance, the other as Lesser Constance; each part is in the ownership of different proprietors. Nevertheless, the wine produced at both these establishments is pretty much equal in quality and each of them has its own aficionados.

In an average year between 120 and 130 barrels of wine are produced; of this, one third is compulsorily purchased by the Company at a fixed price and the rest is sold to whatever purchasers present themselves. The current price is 30 piastres for a measure called an *alvrame*, that is to say a barrel containing 70 bottles of white wine. The price for an *alvrame* of red wine is 35 piastres. A group from the wardroom, including myself, went to dinner at the house of Mr Vanderspie, the proprietor at Upper Constance. He was most hospitable towards us and we drank a great quantity of his wine, some of it while we were at table and some when we sampled the various varieties in order for us to choose what we would purchase.

The ground, on which the vineyards of Constance stand, ends in a gentle slope; the soil is sandy with some gravel. The vines here are cultivated without supports and are hard pruned leaving only a few buds. The wine is made by removing the seeds from the grapes before being fermented in casks situated on the first floor of the vinery. This location benefits from a good circulation of air. On our way back from Constance we made a call at two of the Governor's country manors. The largest of these, called Newlands house, has a garden which is considerably larger and more attractive than the one belonging to the company at the Cape. We had found this last establishment to be considerably less attractive than its reputation had suggested. At Newlands, long allies of tall hornbeams had been set out, giving the place the air of a monastery garden. Oak trees had also been planted, but, they have not thrived particularly well.

The situation concerning the Dutch and the Cape.

There are extensive Dutch plantations extending all along the coastline. These are extremely productive on account of the intense type of cultivation practised here. Another reason is that the farmers are unconstrained, being required only to act within the law for them to rest confident and secure in the ownership of their property.

Settlement of the land has been established at a distance as far away as 150 leagues from the capital. In this entire region, with the sole exception of the dangers posed by wild beasts, they live free from fear of attack by any enemies; the Hottentots, native to this region, leave them completely in peace. One of the most enchanting places in Cape Colony is one which has been given the name "Petite Rochelle". This is a locality that has been colonised by groups of French people who fled from their native land following the revocation of the Edict of Nantes. The land here outstrips every other area for productivity and in the industriousness of its colonists. These people have transferred the name of their native region, which they continue to love passionately, to their adopted home; this in spite of the cruel and unjust treatment meted out to them when they lived there.

From time to time the government sends a caravan to visit the interior of the country. One such expedition, of 8 months duration, took place in the year 1763. This detachment of men penetrated the country to the north and I was assured that they made important discoveries there. However, as it turned out, this journey was not crowned with the success that had been hoped for; this was because discontentment and argument had broken out among the men who had forced their leader to turn back before all the discoveries that might otherwise have been possible were realised.

The Dutch, during their forays into the hinterland, had come across a race of sallow skinned people with long hair that they said were of very fierce temperament.

It was during the course of this journey that a 17 feet tall quadruped was discovered; I will, however, leave the detailed description of it to Mr Buffon, saying only that it was a female accompanied by its fawn, the height of which was only 7 feet. The female was killed and the fawn captured but it died several days later whilst on the road. This animal, I have been assured by Mr Buffon¹⁷⁷, is by naturalists called a giraffe. The species has not been seen by Europeans since the time of Caesar; at which time they were displayed as an entertainment in the Roman amphitheatre. Three years ago another animal was discovered and brought to the Cape where it only lived for two months. It was a quadruped of great beauty resembling, in certain of its features: a bull, a horse and a deer; its genus is entirely new to us. This animal's description, whose strength and speed is equal to its beauty; I will

¹⁷⁷ Georges-Louis Leclerc, *Compte de Buffon*. Celebrated French naturalist, particularly known for his great work " *Histoire Naturelle*, begun in 1749.-JFF

also leave to the expertise of Mr Buffon to describe. It is for a very good reason that Africa has been called the mother of monsters.

We depart from the Cape.

Having embarked a good quantity of excellent food, wine and refreshments of many different sorts, we sailed from the Cape on the afternoon of the 17th. We passed between Robbins Island and the mainland at six o'clock that evening. We took as our point of departure a position bearing South S East 4° South at a distance of 4 leagues from the centre of Robbins Island. The latitude of this position is 33° 40' south and its longitude 15° 48' east of Paris. It had been my intention to try to catch up with Mr Carteret. I had a considerable advantage over him as to speed, but, he was already 11 days ahead of me.

I set a course for the island of St Helena so that I might be assured making a call at Ascension Island for the benefit of the crew's health,

We sight St Helena.

It was at two o'clock in the afternoon of the 29th that we sighted St Helena and the bearings that we took indicated that the difference between our estimated and actual position was not more than 8 or 10 leagues.

February 1769.

During the night of the 3rd and 4th of February, we being in the latitude of Ascension Island and at a distance from it of about 18 leagues, I reduced sail and continued on under only our two top-sails. At dawn the next morning the island was at a distance of something less than 9 leagues and by 11 o'clock we anchored in the north-westerly mooring, also referred to as the Mountain of the Cross Mooring, in a depth of 12 fathoms on a bottom of sand and coral. According to the observations made by Mr l'Abbé de la Caille, the position of our anchorage was 70° 54' south latitude by 16° 19' in longitude west of Paris.

Our call at Ascension Island.

We had barely completed anchoring when I lowered the ships boats into the water and dispatched three work-parties in pursuit of turtles. The first group went, relative to our position, to the north-easterly cove, the second to the north-westerly one and the third to English Bay which is located to the south-west of the island¹⁷⁸. All the conditions indicated that our fishing activities would be crowned with success. We were the only ship in the area, the season was propitious and we were at the time of the new moon. Immediately following the boat's departure I made preparations to improve the mature by fishing our two principal masts at the position below the attachment of the standing rigging; that is to say the main-mast and the fore top-mast (which had split horizontally

¹⁷⁸ There may be some confusion here; what is now called English Bay is on the North West side of the island. - JFF

between the cheeks) were to be joined together; the fore-top-mast with its heel uppermost. Oaken fish-plates were to be used for this work.

During the afternoon I was brought the flask in which encloses a document into which all vessels calling at Ascension Island must inscribe their details. This bottle is inserted in a crevice among the rocks of this bay where it is sheltered both from the waves and the rain. In this document I found the name of the Swallow, the English ship under the command of Mr Carteret; he being the officer I wanted to meet up with. He had arrived here on 31st January and had departed again on 1st February; consequently, since leaving the Cape of Good Hope, we had already made up 6 of the days he was ahead of us. I set down the name of the Boudeuse and returned the bottle to its cavity. We spent the entire day of the 5th installing the fish-plates to the masts beneath the fixtures for the rigging; a tricky operation when moored in a roadstead where the sea is somewhat less than flat calm. Additionally, we overhauled the rigging and embarked the turtles captured by our fishing parties. They had been extremely successful for they had caught 70. Of these animals being only able to embark 56, we set free the remainder. At this anchorage our observations indicated a variation of 9° 45' north-west.

Departure from Ascension Island.

At three o'clock in the morning on the 6th, all the turtles being embarked and the ships boats having been recovered, we began to weigh our anchors and, by five o'clock, we were under sail. Everyone felt elated, both by the quantity of turtles we had obtained and in the knowledge that our next port of call would be in our homeland. How often had we dreamt of this moment since our departure from Brest?

Crossing the line.

After leaving Ascension Island I kept close upon the wind in order to pass as near to the Cape Verde Islands as possible. On the morning of the 11th we crossed the equator for the 6th time during the course of this voyage. We estimated our longitude to be 20° west. Several days later, in spite of the fish-plates that we had installed, our fore-mast was a very sorry sight to see. So bad was it, in fact, that we were obliged to support it by means of the preventer shrouds and by striking the fore top-gallant mast and always keeping the fore-top-sail reefed, and sometimes, completely furled.

We meet up with the Swallow.

On the evening of the 25th we saw a ship ahead of us to windward; we were able to keep her in sight during the entire night. The following morning, having caught up with her, we could see that she was the Swallow.

I offered to give Mr Carteret whatever assistance was possible while we were at sea, but, he was in need of nothing. He told me, however, that at the Cape of Good Hope he had taken on board letters destined for France. I sent over a boat to fetch them. He made me a present of an arrow he had obtained during his voyage around the world. He was completely unaware that we had also made a circumnavigation. His vessel was very small and was a poor sailor. In fact, when we took our departure from him we left him astern, it seemed to us, as if he were at anchor! How badly he and his crew must have suffered in so cramped a ship. When we compared his estimated longitude to our own, we found a difference of 8 leagues; his position he put at that distance to the west of ours.

March 1769. Error in the reckoning of our course.

We had counted on passing to the east of the Azores and, on the morning of the 4th of March, we raised the island of Tercere¹⁷⁹ which we rounded that same day, passing very close to it. The sighting of this island, if one allows that its position is correctly marked on Mr Bellin's chart, indicated that there was an error in our reckoning putting us 67 leagues too far to the west. This was a very large error to be made over a passage as short as that between Ascension Island and the Azores. However, there is no doubt that the longitude of these islands is not, as yet, exactly determined. It is my firm belief that in the region of the Cape Verde Islands there exist some extremely strong currents that probably accounts for this imprecision.

It is extremely important that the longitude of the Azores be accurately determined by good astronomical observations and that the breadth of the channels between the individual islands, including their relative positions one from the other, be accurately measured. Unfortunately, at the time we made our voyage this, much to be desired, situation did not exist. All the charts of every nation were in error to some degree or the other. Happily, this important objective has recently been accomplished by Mr de Fleurieu, Ensign in the service of the King.

After leaving Tercere, I corrected my longitude based on the position of that island as indicated on the great chart of Mr Bellin.

Ushant sighted.

On the afternoon of the 13th our soundings found bottom and, on the morning of the 14th, we sighted Ushant. As there was but little wind and because the tides were contrary to our attempts to double this island, we were obliged to haul-off into the offing. Later the wind became fresh and westerly bringing with it a heavy swell.

A sudden squall damages our rigging.

At about 10 o'clock in the morning, during a violent squall, the fore-mast yard broke between the two jear blocks and, at the same instant, the main-sail was blown out of the bolt ropes from clue to ear-ring; we hove-to without delay under main, fore and mizzen stay-sails and set to work repairing the damage. We got a new main-sail aloft, contrived a mizzen yard, a main top-sail yard and a studding-sail boom to replace the broken fore-yard, so, that by 4 o'clock we were again able to carry sail. However, by this time we could no longer see Ushant because, while we had been hove-to, the wind and current had pushed us into the English Channel.

We arrive in Saint Malo.

I had set my heart on going in Brest and decided to ply, using the variable south-west and north-west winds; but, on the morning of the 15th, it was brought to my attention that there was a considerable risk of the foremast failing below the masthead shrouds. The shock it had been subjected to when its yard had broken had considerably weakened it. Even though we had lowered the yard arm, taken reefs in the fore-sail and close reefed the fore-top-sail to reduce the risk of further damage; we recognised, after a detailed examination, that if we stayed close-hauled the mast would not very long

¹⁷⁹ Now Terceira in the Azores group of islands. - JFF

survive the severe pitching the heavy sea was inflicting on the ship. Adding considerably to the risk of catastrophe was the fact that all our blocks and rigging were, by this time, considerably deteriorated and we no longer had the wherewithal to replace them. In our present condition what chance had we of battling against these severe equinoctial gales, hemmed in as we were between two coasts?

Reluctantly, I decided to bear-away and head the ship for Saint Malo, it being at that time the closest port within which it was practicable to seek refuge. Consequently, on the afternoon of the 16th, I made my entrance into that port.

During a voyage lasting two years and four months we had, since our departure from Nantes, lost only seven men.

*Puppibus & læti nautæ imposuere coronas.*¹⁸⁰

Virgil. *Æneid*. Liv. IV.

End of the Voyage round the World.

¹⁸⁰ The concluding line of Virgil's verse, translated as:
*Genial winter entices them, and soothes their cares:
Just as when loaded ships touch harbor,
And happy sailors crown the stern with garlands:*

APPENDIX NO.1

VOCABULARY of TAHITI ISLAND

NOTE – pronunciation as in the French language

A

Abobo	<i>Tomorrow.</i>
Aibou	<i>Come.</i>
Ainé	<i>Girl, (fille)</i>
Aiouta	<i>There is some</i>
Aipa	<i>The term of negation, there is none.</i>
Aneania	<i>Importune, tedious.</i>
Aouaou	<i>Fie; term of contempt and of displeasure.</i>
Aouereré	<i>Black.</i>
Aouero	<i>Egg.</i>
Aouri	<i>Iron, gold, silver every metal, or instrument of metal.</i>
Aoutti	<i>Flying fish.</i>
Aouira	<i>Lightning.</i>
Apalari	<i>To break or destroy.</i>
Ari	<i>Cocoa-nut.</i>
Arioi	<i>Bachelor, and a man without children.</i>
Ateatea	<i>White.</i>

I know of no word that begins with the consonants equivalent to our B, C or D.

E.

Ea	<i>Root.</i>
Eaï	<i>Fire.</i>
Eaia	<i>Parroquet.</i>
Eaiabou	<i>Vase.</i>
Eaiabou-maa	<i>Vase which is used to put their victuals in.</i>
Eame	<i>Drink made of cocoa nuts.</i>
Eani	<i>All manner of fighting.</i>
Eao	<i>Clouds, also a flower in bud, before it opens.</i>
Eatoua	<i>Divinity. The same word likewise expresses his ministers and also the subordinate good or evil genii.</i>
Eeva	<i>Mourning.</i>
Eie	<i>Sail of a periagua.</i>
Eiva-eoura	<i>Dance or festival of the Taitians.</i>
Eivi	<i>Little.</i>
Eite	<i>To understand.</i>
Elao	<i>A fly.</i>
Emaa	<i>A sting.</i>
Emao	<i>A shark, it likewise signifies to bite.</i>
Emeitai	<i>To give.</i>
Emoé	<i>To sleep.</i>
Enapo	<i>Yesterday.</i>
Enene	<i>To discharge.</i>

Enia	<i>In, upon.</i>
Enninnito	<i>To stretch ones self, yawning.</i>
Enoanoa	<i>To smell well.</i>
Enomoi	<i>Term to call, come hither.</i>
Enoo-te-papa	<i>Sit down.</i>
Enoua	<i>The earth and its different parts (a country).</i>
Endua-Taiti	<i>The country of Taiti.</i>
Enoua-Paris	<i>[France] The country of Paris.</i>
Eo	<i>To sweat.</i>
Eoe-tea	<i>An arrow.</i>
Eoe-pai	<i>A paddle or oar.</i>
Emoure-papa	<i>The tree from which they get the cottons or substance for their stuffs [textiles], the cloth-tree.</i>
Eone	<i>Sand, dust</i>
Eonou	<i>Turtle</i>
Eote	<i>To kiss (baiser).</i>
Eouai	<i>Rain.</i>
Eonao	<i>To steal or rob.</i>
Eououa	<i>Pimples in the face.</i>
Eoui	<i>To belch or eruct.</i>
Eounoa	<i>Daughter-in-law.</i>
Ouramaï	<i>Light (not darkness)</i>
Eouri	<i>A dancer.</i>

Eouriaye	<i>A dancing girl.</i>
Epao	<i>Luminous vapour in the atmosphere, called a shooting-star. At Taiti they are looked upon as evil genii.</i>
Epata	<i>Exclamation to call one's wife.</i>
Epepe	<i>Butterfly.</i>
Epija	<i>Onion.</i>
Epoumaa	<i>Whistle, they make use of it to call the people to their meals.</i>
Epouponi	<i>To blow the fire.</i>
Epouré	<i>To pray.</i>
Epouta	<i>A wound this word likewise signifies the fear.</i>
Era	<i>The sun.</i>
Era-ouao	<i>Rising sun.</i>
Era-ouopo	<i>Setting sun.</i>
Era-ouavatea	<i>Noon sun.</i>
Erai	<i>Heaven.</i>
Erepo	<i>Dirty, unclean.</i>
Ero	<i>Ant.</i>
Eri	<i>King.</i>
Erie	<i>Royal.</i>
Eroï	<i>To wash to cleanse.</i>
Eroleva	<i>Slate.</i>
Eroua	<i>A bole.</i>
Erouai	<i>To vomit.</i>

Eroupe	<i>Very large species of blue pigeon, like those which are in the possession of marshal Soubise.</i>
Etai	<i>Sea.</i>
Etao	<i>To dart, or throw.</i>
Etaye	<i>To weep.</i>
Eteina	<i>Elder brother or sister.</i>
Etouana	<i>Younger brother or sister.</i>
Etere	<i>To go.</i>
Etere-maine	<i>To come back.</i>
Etio	<i>Oyster.</i>
Etipi	<i>To cut, cut (particip.)</i>
Etoi	<i>A hatchet.</i>
Etoumou	<i>A turtle dove.</i>
Etouna	<i>An eel</i>
Eiooua	<i>To grate.</i>
Evaï	<i>The water.</i>
Evaie	<i>Moist.</i>
Evaine	<i>A woman.</i>
Enana	<i>A bowl.</i>
Evare	<i>A house.</i>
Evaroua-t-eatoua	<i>A wish to persons when they sneeze, meaning that the evil genius may not lull thee asleep, or that the good genius may awaken thee.</i>
Evero	<i>A lance.</i>
Evetou	<i>A star.</i>

Evetou-eave	<i>A comet.</i>
Evi	<i>An acid fruit, like a pear, and peculiar to Taiti.</i>
Evuvo	<i>A flute.</i>

The following words are pronounced with a long e, like the Greek n.

nti	<i>Wooden figures representing subordinate genii, and called nti-tane, or nti-aïne, according as they are of the masculine or feminine gender, These figures are employed in religious ceremonies, and the people of Taiti have several of them in their houses.</i>
nieie	<i>Basket.</i>
nou	<i>A fart. They detest it, and burn everything in a house where one has farted.</i>
nouou	<i>A muscle shell (moule.)</i>
nteou-tataou	<i>Colour for marking the body; with it, they make indelible impressions on different parts of the body.</i>
nriri, and ouariri	<i>To be vexed, to be angry.</i>

I know of no word beginning with the consonants F, G.

H.

Horreo	<i>A kind of instrument for soundings made of the heaviest shells.</i>
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I.

Ióre	<i>A rat.</i>
Ioiroi	<i>To fatigue.</i>
Iroto	<i>In.</i>
Ivera	<i>Hot.</i>

I do not know any of their words beginning with the consonant L.

M.

Maa	<i>Eating.</i>
Maea	<i>Twin children.</i>
Maeo	<i>To scratch one's self, to itch.</i>
Maï	<i>Morels, is likewise said maine; it is an adverb of repetition etere, to go, etere-maï or etere-maine, to go once more, to go and come again.</i>
Maglli	<i>Cold.</i>
Mala	<i>More.</i>
Malama	<i>The moon.</i>
Maiou	<i>Considerable, great.</i>
Mama	<i>Light, not heavy.</i>
Mamaï	<i>Sick.</i>
Manoa	<i>Good-day, your servant, expression of politeness or friendship.</i>
Manou	<i>A bird, swift (leger.)</i>
Mao	<i>Hawk for fishing.</i>

Mataï	<i>Wind.</i>
Mataï-malac	<i>East or S.E. wind.</i>
Mataï-aoueraï	<i>West or S.W. wind.</i>
Matao	<i>Fish-hook.</i>
Matapo	<i>One-eyed, squinting.</i>
Matari	<i>The Pleiades.</i>
Matie	<i>Grass, herbage.</i>
Mato	<i>Mountain.</i>
Mate	<i>To kill.</i>
Mea	<i>A thing (chose.)</i>
Meia	<i>Banana-tree, bananas.</i>
Metuua	<i>Parents. Metouatane, or eoure, father; Metouaaine, or erao, mother.</i>
Mimi	<i>To make water, to piss.</i>
Móa	<i>Cock, hen.</i>
Moea	<i>Mat.</i>
Mona	<i>Fine, good.</i>
Moreou	<i>A calm.</i>
Motoua	<i>Grand-son.</i>

N

Nate	<i>To give.</i>
Nie	<i>A sail of a boat.</i>
Niouniou	<i>A jonquil.</i>

O

Oaï	<i>Walls and stones</i>
Oaite	<i>To open.</i>
Oorah	<i>The piece of cloth which they wrap themselves in.</i>
Ooróa	<i>Generous, he that gives.</i>
Opoupoui	<i>To drink.</i>
Oualilo	<i>To steal, to rob.</i>
Ouaouara,	<i>Aigret of feathers.</i>
Ouaora	<i>To cure, or cured.</i>
Ouanao	<i>To lie in.</i>
Ouere	<i>To spit.</i>
Ouatere	<i>The helmsman.</i>
Ouera	<i>Hot.</i>
Oueneo	<i>That does not smell well, it infests.</i>
Ouetopa	<i>To lose, lost.</i>
Ouhi	<i>Ho! Ah! (hé.)</i>
Ouopé	<i>Ripe.</i>
Oupani	<i>Window.</i>
Oura	<i>Red.</i>
Ouri	<i>Dog and quadrupeds.</i>

P

Pai	<i>Dug-out canoe (Piragua).</i>
Paia	<i>Enough.</i>
Papa	<i>Wood, chair, and every piece of furniture of wood.</i>
Papanit	<i>To shut, to stop up.</i>
Paoro	<i>A shell, mother-of-pearl.</i>
Parouai	<i>Dress, cloth.</i>
Patara	<i>Grandfather.</i>
Patiri	<i>Thunder</i>
Picha	<i>Coffer, trunk.</i>
Pirara	<i>Fish.</i>
Piropiro	<i>Stink of a fart, or of excrement.</i>
Pirioi	<i>Lame.</i>
Piripiri	<i>A negative, signifying a covetous man, who gives nothing.</i>
Po	<i>Day, (light)</i>
Póe	<i>Pearl, ornament for the ears.</i>
Poi	<i>For, to.</i>
Poiri	<i>Obscure.</i>
Poria	<i>Fat, lusty, of a good stature.</i>
Porotata	<i>Dog-kennel.</i>
Pouaa	<i>Hog, boar.</i>
Pouerata	<i>Flowers.</i>
Poupoui	<i>Under sail.</i>

Pouta	<i>Wound.</i>
Poto	<i>Little, minute.</i>

I know no word that begins with Q.

R

Rai	<i>Great, big, considerable.</i>
Ratira	<i>Old, aged.</i>
Roa.	<i>Big, very fat.</i>
Roca	<i>Thread.</i>

No word is come to my knowledge beginning with S.

T

Taitai	<i>Salted.</i>
Taio	<i>Friend.</i>
Tamai	<i>Enemy, at war.</i>
Tane	<i>Man, husband.</i>
Tao-titi	<i>Name of the high priestess she is obliged to perpetual virginity and has the highest consideration in the country.</i>
Taoa tane	<i>Married woman.</i>
Taporai	<i>To beat, abuse.</i>
Taoua-mai	<i>Physician.</i>
Taoumi	<i>Ceremonial ornament worn round the neck.</i>
Taoumta	<i>Covering of the head.</i>
Taoura	<i>Cord.</i>
Tata	<i>Man.</i>

Tatoue	<i>The act of copulation.</i>
Tearea	<i>Yellow.</i>
Teouteou	<i>Servant, slave.</i>
Tero	<i>Black.</i>
Tetouarn	<i>Femme barêe</i>
Tiarai	<i>White flowers, which they wear in their ears instead of ornaments.</i>
Titi	<i>A peg, or pin.</i>
Tinatore	<i>A serpent.</i>
Twa	<i>Strong, malignant, powerful.</i>
Tomaiti	<i>Child.</i>
Toni	<i>Exclamation to call the girls [to propose love-making]. They add Peio lengthened, or Pijo softly pronounced, like the Spanish j. If the girl slaps her hand on the out-side of the knee, it is a refusal, but if she says enemoi she thereby expresses her consent.</i>
Toto	<i>Blood.</i>
Toiu-pouou	<i>Hump-backed.</i>
Touaine	<i>Brother or sister, by adding the word which distinguishes the sex.</i>
Toubabaou	<i>To weep.</i>
Touie	<i>Lean.</i>
Toumany	<i>Action of fencing; this they do with a piece of wood, armed with a point, made of harder materials than wood. They put themselves in the same posture as we do for fencing.</i>
Toura	<i>Without.</i>
Toutai	<i>To defecate or urinate.</i>
Toutn	<i>Excrements.</i>

Toupanoa	<i>To open a window or door.</i>
Touroutoto	<i>A decrepit old man.</i>
Toutoi-papa	<i>Light or fire of the great people; niao-papa, light of the common people.</i>

V

Vereva	<i>Flag which is carried before the king and the principal people.</i>
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I know no words beginning with the letters, U, X, Y or Z.

Names of different parts of the body.

Auopo	<i>The crown of the head.</i>
Boho	<i>The skull.</i>
Eouttou	<i>The face.</i>
Mata	<i>The eyes.</i>
Taria	<i>The ears.</i>
Etaa	<i>The jaw.</i>
Eiou	<i>The nose.</i>
Lamolou	<i>The lips.</i>
Ourou	<i>The hairs.</i>
Alielo	<i>The tongue.</i>
Eniou	<i>Teeth.</i>
Eniaou.	<i>Tooth-picks; they make them of wood.</i>

Oumi	<i>The beard.</i>
Papaourou	<i>The cheeks.</i>
Arapoa	<i>The throat.</i>
Taah	<i>Chin.</i>
Eou	<i>Teats, nipples.</i>
Asao	<i>The heart.</i>
Erima	<i>The hand.</i>
Apourima	<i>The inside of the hand.</i>
Eaiou	<i>The nails.</i>
Etoua	<i>The back.</i>
Etapono	<i>The shoulders.</i>
Obou	<i>The bowels.</i>
Tinai	<i>The belly.</i>
Pito	<i>The navel.</i>
Toutaba	<i>The glands of the groin.</i>
Etoe	<i>Buttocks.</i>
Aoua	<i>Thighs.</i>
Eanai	<i>Legs.</i>
Etapoué	<i>The foot.</i>
Eoua	<i>Testicles.</i>
Eoure	<i>The male parts.</i>
Erao	<i>The female parts.</i>
Eorao	<i>The clitoris.</i>

Numerals.

Atai	<i>One.</i>
Aroua.	<i>Two.</i>
Atorou	<i>Three.</i>
Aheho	<i>Four.</i>
Erima	<i>Five.</i>
Aouno	<i>Six.</i>
Ahitou	<i>Seven.</i>
Awarou	<i>Eight.</i>
Ahiva	<i>Nine.</i>
Aourou	<i>Ten.</i>

They have no words to express eleven, twelve, &c. They repeat Atai, Aroua, &c. till to twenty, which they call ataitao. Atairao-mala-atai Twenty, more one, or twenty one, &c.

Ataitao-mala-aourou Thirty, i. e. 20 mere 10.

Aroua-tao Forty.

Aroua-tao mala atorou Forty-three, &c.

Aroua-tao mala aourou Fifty, or 40 more 10.

I could not make Aotourou count beyond this last number.

Names of Plants.

Amiami Cotyledon.

Amoa	<i>Fern.</i>
Aoute	<i>Rose.</i>
Eaaeo	<i>Sugar-cane.</i>
Eaere	<i>Weeping-willow, or Babylonian willow.</i>
Eaia	<i>Pears.</i>
Eape	<i>Virginian arum.</i>
Eatou	<i>Lys de S. Jaques, a species of lily.</i>
Eoe	<i>Bamboo.</i>
Eóai	<i>Indigo.</i>
Eora	<i>Indian saffron.</i>
Eotonoutou	<i>Figs.</i>
Eoui	<i>Yams.</i>
Epoua	<i>Rhubarb.</i>
Eraca	<i>Chesnuts.</i>
Erca	<i>Ginger.</i>
Etaro	<i>Purple arum.</i>
Eti	<i>Dragon's blood.</i>
Etiare	<i>Grenadille, or passion-flower.</i>
Etoutou	<i>Three leaved sumach.</i>
Maireraro	<i>Rivina.</i>
Mati	<i>Raisins.</i>
Oporo-maa	<i>Pepper.</i>
Pouraou	<i>Cayenne-rose.</i>

Toroire

Heliotropium, or tournesol.

They have a kind of article answering to our articles of and to (de & à). This is the word te. Thus they say parouai-te Aotourou; the clothes of or (belonging) to Aotourou; maa-te-eri. the eating of kings.

BOUGAINVILLE LOUIS ANTOINE comte de (1729-1811)

Louis-Antoine de Bougainville, later Count; was born in Paris on 12 November 1729. His father, Pierre-Yves de Bougainville, held a lucrative administrative position in Paris as member of the king's council and notary at the Châtelet. His mother was Marie-Françoise d'Arboulin.

He was a taller than the average man and possessed of strikingly blue eyes that shone from a face glowing with health and good humour.

His uncle, Jean d'Arboulin, was the minister for *postes* and a member Madame Pompadour's inner circle; she, at this time was mistress to King Louis XV. His elder brother, Jean-Pierre, was an advocate to the royal household, a noted scientist, a distinguished author and man of letters. Jean-Pierre's death at the age of forty years saddened Louis inconsolably. However, as is often the case with siblings, Jean-Pierre's character was utterly different from that of Louis-Antoine.

Louis-Antoine married Flore-Josèphe de Longchamps-Montendre in 1780, she being almost 30 years younger than he. They had four children.

Bougainville died in Paris on 20 August 1811 and was buried in the Pantheon on 3 September. He had expressed a wish that he be interred with Flore-Josèphe, who had predeceased him. To accommodate the wishes of the state to award him a resting place with appropriate military honours, she had to be content with just his heart which was interred with her in the cemetery of Montmartre Calvaire, Paris. He enjoyed the benefits of an upper-class upbringing and actually relished his classical education; he retained a lifelong fondness for scattering Latin quotations, particularly Virgilian ones, into his writings. He frequently had the opportunity to rub shoulders with intelligent, sophisticated and often aristocratic members of his family's wide circle of contacts and acquaintances.

It was said of him that he:

"is as familiar with the hazards that lie below the elegant surface of Paris salon society as he is with the reefs lurking beneath the surface of the sea; and, equally adept at avoiding them both!"

Early on in his education he showed a particular aptitude for mathematics, which he first studied under Alexis Clairaut and Jean Le Rond d'Alembert. In 1754 he published the first volume of his *Treatise on Integral Calculus* (*Traité de calcul integral*) in two volumes; this work supplemented a book on Integral Calculus that had been written by *Guillaume François Antoine, Marquis de l'Hôpital*, more than half a century earlier. Additionally, it brought some aspects of the Differential Calculus into line with more recent thinking, thus providing a more up-to-date and comprehensive text.

This work won Bougainville the patronage of the *Comte d'Argenson*, minister for War and a member of the Academy of Science.

George-Louis le Clerc, the Naturalist, mathematician and cosmologist wrote of this work:

He brought such clarity and order to the subject, as well as incorporating new work, that he achieved immediate recognition.

The Science Academy (*l'Académie des Sciences*) noticed the work in January 1753.

In 1756, now on the staff of the French ambassador to London (*Marechal de Levis-Mirepoix*); he published the 2nd volume of *A Treatise on Integral Calculus*. This publication led to him being elected, in 1756, to the prestigious Royal Society of London. This honour, however, marks the end rather than the beginning of his career as a mathematician.

During the time he spent in London he exchanged ideas with the British admiral George Anson. He studied, with great interest, Anson's account of the, not entirely successful, circumnavigation Anson had made in 1740-44. It is possible that the idea to establish a colony in the Falkland Islands occurred to him as a result of his conversations with Anson.

In 1750, at the relatively advanced age of 21 years (for joining the army), Bougainville enlisted in the Black Musketeers (*Mousquetaires Noirs*). In 1753 he was promoted to adjutant in the Picardie Regiment.

He later joined the staff of General *François de Chevert* and served as his aide-de-camp during 1754 before going to England in the capacity of secretary to the extraordinary ambassador to London *Maréchal de Lévis-Mirepoix*, in October of that same year.

He returned to France in February 1755 and on the 27th of that month was commissioned as captain of dragoons in the French army. When, in 1756, *Louis-Joseph de Montcalm* was promoted major-general (*maréchal de camp*) to command the French regular army in Canada, Bougainville was attached to his staff as aide-de-camp. He and *Montcalm* sailed from Brest on 3 April 1756 aboard the 32 gun frigate the Unicorn (*La Licorne*).

Hostilities between France and the Britain had broken out, yet again, in North America. This conflict, now referred to as The 7 Years War, was also known as the French and Indian War (1754-63).

Bougainville, although he had no combat experience, took an active part in the military campaign. In July and August 1756 he participated in the attack and capture of Fort Oswego (located in what is now the town of Oswego, N.Y.). This successful action secured for the French control of Lake Ontario. His enterprise in the field earned him the praise of Montcalm and Louis was commended by him to the minister of war in the following words:

"You would not believe the resources I find in him. He is capable of giving a good description of what he sees. He exposes himself readily to gunfire, a matter on which he needs to be restrained rather than encouraged. I shall be much mistaken if he does not have a good head for soldiering when experience has taught him to foresee the potential for difficulties. In the meantime, there is hardly any other young man who, having received only the theory, knows as much about it [soldiering] as he."

Montcalm hoped to see his aide-de-camp admitted into the Science Academy (*Académie des Sciences*).

During September 1756, at the behest of *Pierre de Rigaud, Marquis de Vaudreuil-Cavagnial* (the Canadian born Regional Governor), he made a detailed reconnaissance of British troop deployments in the region around Lake Champlain. The French considered this to be the direction an attack was most likely to be launched.

In August 1757 he was engaged in several field actions and skirmishes. When Montcalm captured Fort William Henry (known to the French as Fort George from its situation at the southern end of Lake George in the province of New York), Bougainville was dispatched to *Vaudreuil-Cavagnial* with news of this successful action. This, however, was a victory that Montcalm was neither competent, or had the resources, to fully exploit.

At this time the well documented animosity that had been building up between Montcalm and Vaudreuil-Cavagnial had reached an intensity that was seriously compromising the entire campaign. Bougainville was frequently caught in the crossfire of their interminable squabbling. He quickly grasped, and was sympathetic towards, the local militia's preference for employing guerrilla tactics and, at all costs, avoiding pitched battles. Montcalm was of an entirely different frame of mind. Be that as it may, Bougainville clearly shared Montcalm's violent antipathy towards the Canadians. In a

report to Nicolas-René Berryer who held, amongst others, the position of minister of marine; he wrote:

“The troops of the regular army and those of the colonial regulars are in an admirable frame of mind. They will shed their blood for every step that has to be conceded to the enemy. But, the militia and the Indians are vain in victory, are incapable of anything other than guerrilla warfare and are poorly suited for defensive actions. They are easily and profoundly discouraged in adversity and under such circumstances lack courage or constancy.”

Later in 1757 Bougainville, with the co-operation of Gabriel Pellegrin, (a French navy pilot, seconded to assist the port captain of Quebec) drew up a plan of campaign for an attack on the British establishments in Hudson’s Bay. It was never implemented. In October 1757, again with Gabriel Pellegrin, he made a survey of the north shore of the St. Lawrence from Quebec to Cape Tourmente. In July 1758 Bougainville was wounded near Ticonderoga, N.Y. at the battle of Carillon. Although this particular action was, without doubt, a victory for the French; it had little impact on the overall state of affairs. The sword of Damocles hung ever menacingly over the nascent colony; the British military position continued to be overwhelmingly superior. The situation was, of course, made considerably worse by the propensity, mutually displayed, for Montcalm and Vaudreuil-Cavagnial to disagree about almost everything! Theirs was an innate antipathy exacerbated by the fact that each of them was accountable to a different ministry. Nonetheless, In September 1758 these two gentlemen were forced by circumstance to agree that a mission be sent to France to report on how critical had become the state of affairs in New France. Bougainville was chosen as Montcalm’s representative. Vaudreuil-Cavagnial sent Major Michel-Jean-Hugues Péan. They sailed in the frigate *Victoire* on 15 Nov. 1758 and landed at Morlaix, early in 1759.

In the reports Bougainville prepared for the minister of marine he considerably, probably intentionally, overstated the British strength and cast an even darker gloom over Montcalm’s assessment of French and Canadian resources and capabilities; he wrote:

“It seems to me therefore that the court should treat Canada today as a sick person whom one sustains with stimulants, that is to say, only those materials absolutely necessary for a prolonged defence should be dispatched.”

During the time he spent with Berryer he presented a range of well thought out proposals to improve the state of readiness to counter the assault he considered certain and imminent. He also took the opportunity to state, in unflattering terms, that the administration of François Bigot, the head **of the** financial commissary of Île Royale and intendant of New France (Canada), by its corrupt and excessively authoritarian nature, considerably compounded the colony’s troubles.

Although his mission to France had, seemingly, been well received; it resulted in very little in the way of practical support. Nevertheless, he did gain promotion to the rank of colonel and was given the order of Knight of Saint-Louis. He sailed from France aboard the *Chézine* on 28 March 1759 and arrived back in Quebec to resume his duties in early May.

Another honour bestowed on him during his time in Canada, contrasting somewhat with other distinctions he would receive, but, no less pleasing to him, was to be made a chief and blood brother of the Iroquois Red-Indians. He had the tribal name Garionatsigoo, meaning something like "Threatening Sky" bestowed upon him. He wrote to his family of this event:

"You see me now as an Iroquois chief! My tribe is that of the Turtle [a creature] considered to be eloquent and wise in council. The elders of the tribe have showed me off to their entire nation. I chanted a war song at the feast where they gave me all the best cuts."

It is, perhaps, because of this close encounter with the Iroquois that a rumour gained credibility suggesting Bougainville had embarked on an intimate relationship with the, of course beautiful, daughter of an Iroquois chief. Her name is supposed to have been, according to some writers. There has even been a claim of paternity by one who proposed he was the fruit of their loins. Though apocryphal, I have mentioned this charmingly romantic event, because it adds a touch of levity at this otherwise bleak period and, of course, it could possibly be true. Some might even consider the episode probable, in view of Bougainville's well attested appeal to the opposite sex. Or perhaps it is merely a balancing of the scales. How could it possibly be that a lusty French bachelor did not do so well for himself as dull old John Smith, with his Pocahontas?

His return and the prospect of reinforcements arriving, be they ever so meagre, heartened the citizenry. They having been rationed to a quarter-pound of bread and a half-pound of horse meat a day during what had been a very severe winter.

Their optimism was to be of only short duration, however. Although more than 20 supply ships did arrive at Quebec with the *Chézine*, there were no more than 300 troops embarked and they were the most sorely needed commodity of all.

One very positive result of his lobbying in France was the confirmation of Montcalm's overall authority; this went a long way towards defusing the animosity between him and Vaudreuil-Cavagnial.

Soon after his return Bougainville left with Anne-Joseph-Hippolyte Maurès de Malartic to reconnoitre defensive positions around the town.

In June 1759 he took command of the camp at nearby Beauport. On 27 June the British landed on Île d'Orléans and on 29 and 30 June at Pointe-Lévy, and again, on 9 July, at Montmorency. When the British withdrew, on 31 July, after their unsuccessful attack on the camp at Montmorency;

Bougainville, supported by 500 men, was ordered to protect the communications between Quebec and Montreal and to ensure the security of the supply routes to Quebec. Accordingly, he covered the movements of the British fleet up to Pointe-aux-Trembles (Neuville), where, on 8 August, he repelled two attempted landings. On 17 August he drove back a force attempting to disembark at Deschambault. Later in August he prevented the British from landing at Saint-Augustin.

The British were at last successful in achieving a foothold, and, on 13 September, they landed at the ill defended Anse au Foulon. Back-footed at seeing enemy troops so close to Quebec, Montcalm committed a series of serious errors. First among these was the failure to give Bougainville the order to enfilade Wolfe's not very substantial force. Worse, he neglected the basic military principle of force

concentration. Bougainville's troops, now numbering about 1,200 men, were strung out along the St Lawrence and he found it impossible, because of poor communications, to regroup in order to take part in the battle of the Plains of Abraham. When the French surrendered on 18 September he established a position towards Saint-Augustin. Later he returned to Quebec to negotiate for the exchange of prisoners and to make provision for the sick and wounded left behind in the hospital. During the winter of 1759–60 he directed operations to harass the British garrison at Quebec until the beginning of March 1760 when Vaudreuil sent him to take command of the Fort de Île aux Noix sector on the River Richelieu. Here the situation quickly took a tragic turn because of desertions and defection of the Indians; they, seeing the writing was on the wall, went over *en masse* to the British. On 22 August 1760 an attack by William Haviland was repulsed; but, on 27 August Bougainville, realising the fort would inevitably fall, evacuated under cover of darkness retreating through a wooded area. Only one officer and 30 men were left behind to protect the wounded. Although this was, without doubt, an unavoidable withdrawal it resulted in him being reprimanded by Bigot. In early September he assumed the somewhat irksome duty of intermediary, acting for Vaudreuil, in negotiations with the British Brigadier Jeffrey Amherst (a rank applying only whilst serving in the Americas) to establish the terms for the surrender of Montreal. As a result, Bougainville and the rest of the French force in Canada became prisoners of war and were later, in accordance with the surrender terms, returned to France.

Bougainville's military accomplishments in Canada were not particularly outstanding and he has been criticised by some historians claiming that he bore some responsibility for the French debacle in Canada. A judgement that, bearing in mind his relatively junior rank and the shortcomings of several amongst his superiors, is certainly not justified.

For a while he revelled in the pleasures of being settled once again into the whirl of Paris salon life. Soon, however, his impotence, under the terms of his parole began to chafe; he longed to "do his bit" for France. In 1761, through long established friends in England, he applied to be released from parole; this request was politely, even flatteringly, but, nevertheless, very firmly refused.

Perhaps, it was the long sea voyage back to France that gave him time to consider what it was that he could do to help restore the nation's self-esteem and, at the same time, polish up his own slightly tarnished reputation.

What he came up with was a proposal to setting up a colony in the Falkland Islands; a project he and members of his family were prepared to undertake, largely at their own expense.

He informed Étienne-François, Duc de Choiseul, recently made minister of Marine:

"I have formed the *Compagnie de St. Malo* with my uncle, (Jean a'Arboulain) my cousin (Michel-François Bougainville de Nerville) and a shipbuilder in Saint-Malo to finance the operation."

Choiseul realised that the Falkland Islands had considerable potential. A base located there would enable France to control access into the Pacific and would serve as a "half-way-house"; a base to facilitate further exploration and exploitation in the South Pacific Ocean. It would also enable trade with the South American continent to be expanded. Consequently, he offered his support to obtain

the necessary approvals and his assistance in planning the project. It was Choiseul who in June 1763 waved the magic wand enabling Bougainville to be transformed from an army officer into a ship's captain (*capitaine de frigate*) with only rudimentary professional preparation.

Bougainville, always a compassionate man, sought in the Falkland Islands undertaking to alleviate the suffering of the many Canadians (Arcadians) who had been displaced as a result of the loss of France's territories in the New World.

In September that same year (1763) he sailed from Saint Malo in the Eagle (*l'Aigle*) in company with a supply ship, *la Sphinx*. The several families destined to form the nascent colony and some administrators, appointed by Bougainville, landed in the Falkland Islands on the 3rd February 1764. Bougainville devoted considerable time, effort and resources to ensure the new venture got off to the best possible start.

Details relating to this expedition were collated by Dom Pernety (a French clergyman and member of the Royal Academy of Sciences; he had accompanied Bougainville on the voyage) into a two volume work, (translated into a single volume in English, entitled "The Account of a Journey to the Falkland Islands in 1763-1764 (*"Histoire d'un Voyage aux Isles Malouines fait en 1763-1764"*)). The book was published by Saillant & Nyon, Paris. Both the French and English editions of this book are available, in PDF format, (free of charge), from Google Books.

The Spanish crown immediately complained at what it considered to be an unacceptable intrusion into its own back-yard. France and Spain were, at the time, enjoying peaceful relations and a formula was quickly hatched by which the Falkland Islands would revert to Spanish ownership on condition that the islands should remain occupied and that those Arcadians, who so wished, be allowed to remain. So amicably was the situation resolved that the Spanish king reimbursed France, and Bougainville, the entire cost of setting up the new colony.

On the 5 December 1766 the frigate *la Boudeuse* and the store-ship *Etoile* sailed from Brest on the adventure that is the subject of the main part of this book.¹⁸¹

Once the primary political objective of transferring the Falklands to Spain had been achieved the voyage was to be continued with an equally, if not more important objective. The ships were to make a prestigious circumnavigation, the first for a French ship. This, it was thought, would re-establish France on the world stage and restore some of her self-esteem, somewhat dented by the loss of her Canadian territories.

There were also serious scientific objectives. Aboard the ships were three specialists: Charles Routier de Romainville, an engineer charged with improving the accuracy of currently available charts, the astronomer Pierre-Antoine Veron, to improve the methods by which longitude might be more accurately determined and the botanist Philibert Commerson. This botanist is best remembered today, not for his most important contribution to the voyage, but for the discovery, in Brazil, of a

¹⁸¹ *La Boudeuse* can be literally translated from modern French as "the Sulky Woman," but, my personal feeling is that the name was intended to suggest a ship, (not always female to a French mariner), her features resolutely and sternly set, contemptuous of whatever ills the sea or misfortune might throw at her.-JFF

climbing plant which he honoured his captain by naming it “Bougainvillaea” (*Bougainvillée*). Louis-Antoine was later to present the plant to Joséphine de Beauharnais.

Additionally, there was a possibility that the voyage might resolve the long standing and vexing question concerning the existence of Terra Australis; the mythical Great Southern Continent, which had, conjecturally, appeared on charts since the 15th century. The thinking behind why this continent should exist was, it was reasoned, because the land mass in the northern hemisphere must, logically, be counterpoised by an equivalent mass in the southern one.

Bougainville had mixed feelings on the subject. On the one hand he wrote:

“... that it is difficult to conceive such a number of low islands and almost drowned lands without a continent being near them ...”

While, on the other:

“... if any considerable land existed hereabouts we could not have failed to meet with it.”

An expectation of somewhat lesser gravity, but nonetheless one provoking great interest, was to determine the truth concerning whether or not, the inhabitants of Patagonia and Tierra del Fuego were giants; several navigators had reported seeing men of great stature there.

There was to be a trial of a newly invented apparatus called a “*Cucurbite*”. This device had been installed on *l'Etoile* for the purpose of producing fresh water from sea-water.

In March 1770, following his return to France, Bougainville had been formally and permanently enrolled into the navy with the rank captain *capitaine de vaisseau* (specifically captain of a warship). During the time he commanded *l'Aigle* and *la Boudeuse* he had been, strictly speaking, *capitaine de frigate*. Nevertheless, when he is referred to during this period, it is usually by the title: *capitaine de vaisseau*.

In December 1771, when he was elected an associate member of the Marine Academy (*Académie de Marine*), some derogatory remarks were made by the Marquis de Montalais (an officer in the “red” camp), concerning Louis’ suitability, as a “blue”, to hold this position. Bougainville demanded satisfaction. The ensuing duel resulted in de Montalais being wounded in the arm.

It was during this period that he considered the possibility of making a scientific voyage into the Polar Regions; it was, however, to be a project that remained unrealised.

In 1775 he served as second in command in the 30 gun frigate *la Terpsichore*; in 1776 aboard *la Solitaire* and in 1777 was appointed commander of the 74 gun Ship-of-the-Line *la Bien-Aimé*.

In April 1778 he was given command of *le Guerrier* (the Warrior) a “*Magnifique*” class 74 gun Ship-of-the-Line and was deployed, under Vice-Admiral the Comte d’Estaing, to serve in American and West Indian waters as part of French naval support for the American Revolutionary War . While on this station he took part in the capture of the Island of Grenada on 6 July 1779 and, in October the same year, in the unsuccessful attempt to take the town of Savannah in the state of Georgia.

Promoted rear-admiral (*contre amiral*) on 8 December 1781, he took command of the 80 gun-ship-of-the-line *l'Auguste*, a unit in the squadron commanded by the Comte de Grasses. He distinguished himself in September 1781 at the battle of Chesapeake Bay, an action which ultimately led to the

surrender of Yorktown (Virginia) and a British defeat which contributed significantly towards the United States gaining its independence.

In January and February 1782 Bougainville took part at an action in the Leeward Islands which resulted in the capture of St Christopher, the larger of the Saint Kitts and Nevis Islands.

On 12 April 1782 he participated in the battle of the Saints (*Bataille de la Dominique*) in which the French fleet were defeated by the British admiral Sir George Rodney. The French admiral le Comte de Grasse laid the blame for the defeat upon his subordinates. Subsequently, a court martial was convened at Lorient in 1784 and Bougainville was given a reprimand.

In 1783 he was admitted into the Order of Cincinnatus on the occasion of organisation's foundation.

On 2 December 1784 Bougainville was admitted into the Marine Academy as a full member. He was appointed by the minister of marine as a scientific adviser and in this capacity he assisted in the preparations, then in hand, for the projected, but as it turned out, ill-fated, voyage of le Comte de Lapérouse.

In February 1789 he was made a member of the *Académie des Sciences*.

In October 1790 he was given command of the Brest squadron. An appointment he quickly relinquished because of the confusion and increasingly chaotic political situation which were the first stirrings leading to the outbreak of the French revolution. From Bougainville's perspective, the worst manifestation of this uprising was the rampant, almost fleet wide, disintegration of discipline within the navy.

In 1792 he refused an offer of the post of minister of marine for the same reasons.

Nevertheless, on 1 January 1792 he was again promoted, now to vice-admiral (*vice-amiral d'escadre*); but, once again, he resigned almost immediately.

The Bastille had by this time already fallen; there had been disturbances caused by gangs of prowling revolutionaries in many localities, and, as a result, it was at about this time he sold his small estate at La Brosse and purchased a small residence, la Becquetiere, at Annville-sur-Mer, in Normandy.

On the 20 June 1792, when an armed mob invaded the hall of the National Assembly and the Tuileries, putting the life of the king in grave peril, Bougainville was present and instrumental in providing him protection.

He had never concealed his royalist sympathies and so, during the Terror, it is not surprising that he was arrested and imprisoned at Coutances. Fortunately, when Robespierre was overthrown and executed in 1794, Bougainville was released and settled into a sort of semi-retirement on his estate at Anneville-sur-Mer.

On 19 December 1795 he was made a member of the new French Institute (*Institut de France*) and it was in this capacity, in July 1798, he was appointed a member of the commission then making preparations for the planned expedition into Egypt.

In December 1799, he became a senator and member in the Bureau des Longitudes and an associate in the organization of an expedition to explore the Australian coastline. This enterprise would ultimately be undertaken by Admiral Nicolas Baudin.

In the early 1800s, on hearing that the English cartographer and surveyor of the Australian coastline, Matthew Flinders, was being held prisoner on l'Ile de France (Mauritius), he made an impassioned plea to the emperor for Flinders release. It was considered by many French naval officers that Flinders' long detention was unjustified and the charge against him, of him being a spy, utterly ridiculous.

In 1804 he was awarded the Légion d'honneur and then, in 1808, Napoleon created him a count of the Empire (*compte d'Empire*).

Rather less to his liking, he was appointed president of the court martial, convened in 1809, following the disaster (for the French and Spanish fleets) that was the battle of Trafalgar.

Louis-Antoine de Bougainville died peacefully in Paris on 20 August 1811, in his 82nd year laden with the honours that Napoleon had bestowed upon him.

At the end of an exceptionally long and full career; this aristocratic, many faceted and talented: army officer, navigator, mathematician, explorer, diplomat and, perhaps above all else, gentleman, was laid to rest in the Pantheon.

I hope that this thumbnail sketch of Bougainville's life has been of interest. For further reading I don't believe I could do better than to recommend John Dunmore's, un-put-downable book, "Storms & Dreams"



Bougainville, as a young man



Louis-Antoine de Bougainville, 1729-1811

By Jean-Pierre_Franquel

Appendix 3

THE SHIPS & CREWS

THE BOUDEUSE

The Boudeuse, 550 tonnes displacement, was a type 12 frigate designed to be armed with 32 canon, 26 were 12 and 6 were 6 pounders, all mounted in a single battery. For the voyage round the world some cannon were stored in the hold. This class of ship had been brought into service shortly before the 7 years' war (1756-63). Three identical vessels were constructed; the others were *l'Indiscrète* and *la Sensible*. Boudeuse was capable of being manœuvred under oars, should the need be sufficiently desperate! All sail deployed, her bottom free of fouling and under very favourable sea and wind conditions; she was capable of making about 14 knots.

As a general practice this type of vessel was laid down to have a length of 42.20 meters (130 French feet (*pieds*)) and a beam of 11.0 meters; the hull drew 5.51 meters. The Boudeuse, however, was somewhat smaller being 40.60m long, 10.50m in the beam having a draught of about 5.35m. She had been newly constructed at Indre, just downstream from Nantes, by the shipbuilding company of Raffeau to a design by Jean-Hyacinthe Raffeau. Some of the construction activities were sub-contracted to Danyard & Co. Both of these companies had previously been contracted to carry out work for the French East India Company. Many of the vessels these yards had built, of design similar to the Boudeuse, had acquired a reputation for reliability. Some had been constructed for the, at that time, lucrative slave trade.

Although referred to as a frigate (under normal circumstances a small warship) the vessels built for the Indies and China trade were shorter, broader in the beam and of shallower draught. Thus, her length to beam ratio was 3.84 while her beam to draught ratio was 1.96. For a frigate constructed as a warship these ratio would have been about 3.6 & 2.65 respectively.

She had 3 Riga fir masts in excess of 40 metres in height, a cargo capacity of 960 tonneaux (about 2730 m³) Her running and standing rigging and other cordage was manufactured in Nantes; her sails came from a sailmaker in Angers. Her main-sail had an area of some 225m². Her hull was painted red but had a contrasting yellow band that included the bulwark timbers about the gun-ports.

As was usual in the 18 century considerable effort, skill and expense was expended on the ornamentation of her transom and the proudly sculptured stylised lion that was her figurehead. Refer to the illustrations taken from her original design drawings at the end of this appendix.

The Boudeuse had a single artillery deck 1.2m above the sea, but, somewhat higher toward the bow and stern. Below the main-deck was the Orlop-deck; the headroom under the main transverse beams was no more than 1.60m (5' 3"); this relatively vast space is where the crew, the soldiers and the midshipmen ate. They slept there too in hammocks slung so closely together as to be almost touching. The Orlop was also home to: cattle, sheep, pigs, goats and poultry. Here also was stored all the forage embarked to sustain the livestock. For the first few weeks of the voyage, until most of the animals had been killed and eaten it was a very congested place. Some cows and goats, however, survived for many months, even years; they were the milk, butter and cheese making machines.

The Orlop was partitioned from the Gun-Room towards the stern where there was a little more headroom. Here were accommodated: the officers, Petty Officers and the chief gunner. They enjoyed the luxury of two small scuttles (portholes) pierced through the transom. In the fore part of the Gun-Room were two cabins of some 5m² occupied by the surgeon and the ship's chaplain.

Raised up about 1.80m above the main-deck and astern of the mizzen-mast was the quarter-deck. Below the quarter-deck was the great cabin extending 6m longitudinally and 7m transversally. This space was lit mainly by the transom windows. Here Bougainville's cabin was situated. On each side, projecting out from the hull were constructed the quarter-galleries. They are balcony like structures, accessed from the main-cabin, and provided with washing and toilet facilities. In the centre of the main-cabin was fixed a large table around which were set lockers that served dually as seating and for the storage of provisions.

Forward of the great cabin, and on each side of the ship, were 2 small officer's cabins.

Between the mainmast and the fo'c'sle (forecastle), hedged in by the gun carriages and obstructed by the ship's boat, was the main access way; known as "the highway" (*la grand'rue*). Below the fo'c'sle were the galleys; a separate one for the officers, petty officers, sailors, and soldiers. Each galley comprised of nothing more than a sand filled hearth and a few simple cooking vessels. In the very bows of the ship were the "heads" (toilets). Total absence of privacy went unremarked; the discomfort caused by torrential rain and head seas were unavoidably tolerated.

The quarterdeck was the preserve of officers; apart that is, from the helmsmen and a multitude of poultry.

Beneath the orlop-deck were situated the holds; from the stern going forward these were: the armoury and powder-room, the bread-room, the main provisions-room, water storage, the sail-room, the cable-locker and furthest forward a storage space for rigging and other ship's equipment; above this compartment was a "ready-use" munitions store.

Bougainville had a perennial problem of insufficient storage space, particularly for victuals. This difficulty was compounded by the need to accommodate a large quantity of cheap goods (*pacotille*) for trading and bribery purposes.

The Boudeuse's end, after so distinguished a service life spanning 24 years, was something of an anti-climax. She was broken up, her good timbers were salvaged, but, the bulk was sold to bakeries to be burnt in their ovens.

THE ETOILE,

480 tonnes, was built as a store-ship (*flute*) length 33.80m, beam 9.01m and draught 3.75m. She was armed with twenty, 6 pounder cannon.

Something of her appearance can be gained from one of her original design drawings, included at the end of this appendix.

Having command of these two vessels Bougainville had at his disposal the equivalent of the largest class of armed merchant ships designed for trading voyages anywhere in the world. They would be somewhat faster sailers with proportionally less cargo-carrying capacity than their purely commercial counterparts.

The composition of the two ship's crews was:

La Boudeuse

47 Sea Officers
4 Artillery Officers
5 Army Officers
100 Seamen

L'Etoile

18 Sea Officers
11 Petty Officers
14 Midshipmen
3 Helmsmen

3 Volunteers

1 Marine

2 Musicians

5 Servants

1 Supernumerary

25 Soldiers

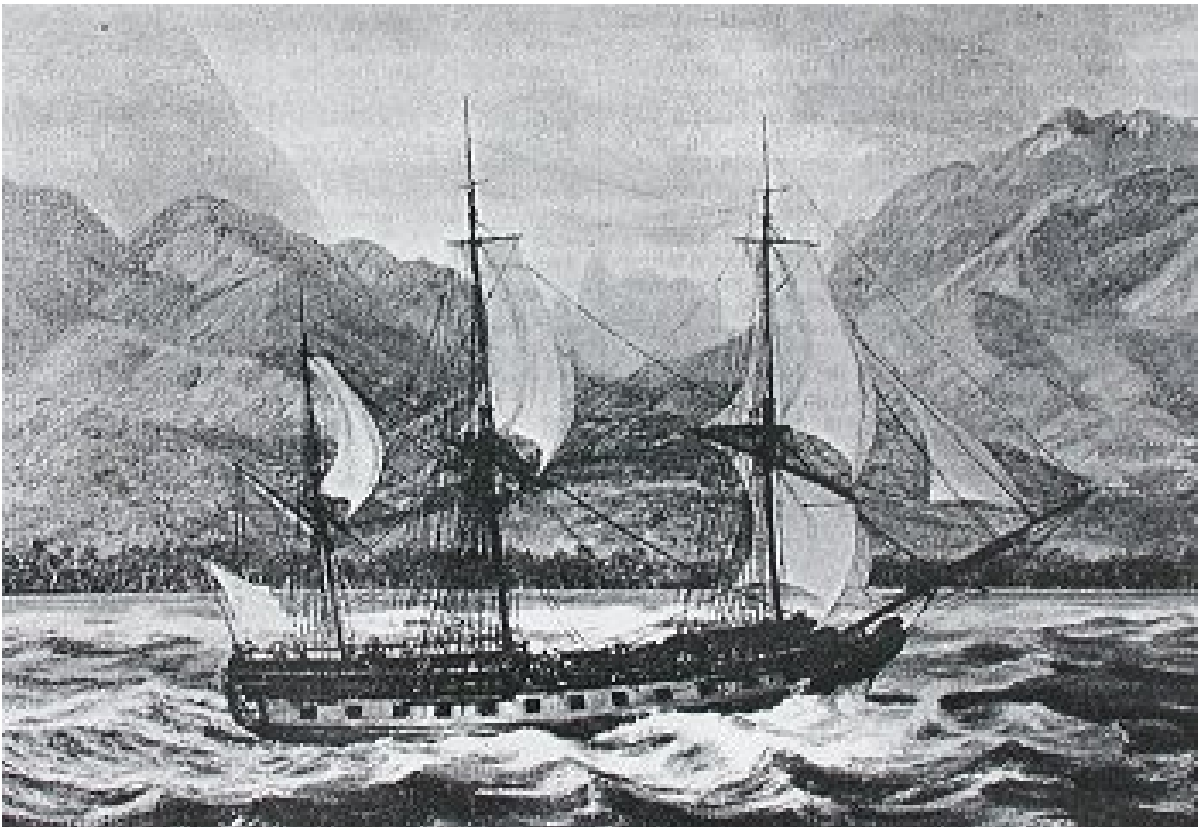
1 Volunteer

18 Condemned prisoners

2 Supernumeraries

1 Servant

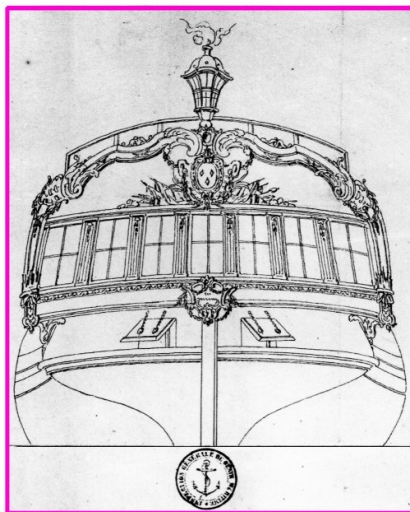
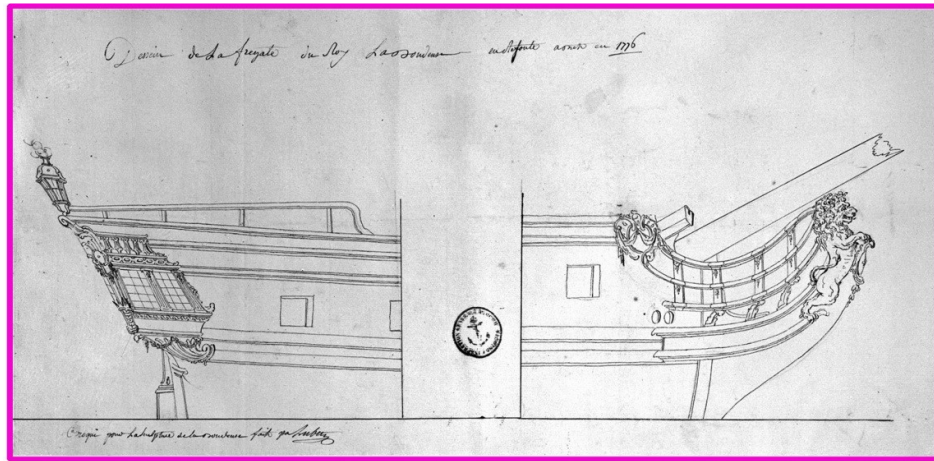
The only, confirmed, representation of la Boudeuse - showing her off the coast of Chile.



A much better impression of what she looked like may be gained from this picture of a model of an 18 century French Frigate of not dissimilar design to the Boudeuse. Other, zoomable, views of this vessel may be seen at:

<http://www.modelships.de/French-40-gun-frigate/Photos-French-40-gun-frigate.htm>

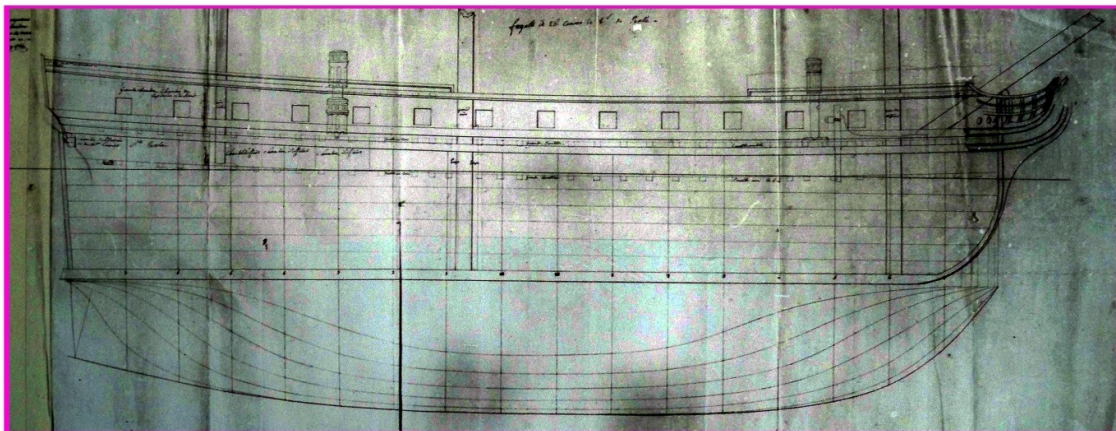




Above & Left

La Boudeuse

Bow, Transom & Quarter Ornamentation



L'Etoile, Hull Schematic Drawing

Appendix 4

REASONS WHY THE VOYAGE WAS UNDERTAKEN.

The motives for the enterprise were both nationalistic and personal or, a combination of the two.

1. The project was given its initial impetus by the need to implement the hand-over the colony in the Falkland Islands to Spain. When the colony was set up the French government had not consulted Spain, their ally at that time. Although Spain's reaction had been given some consideration, it had been seriously misjudged.
2. It was plausibly argued that, having already voyaged as far as the east coast of South America and bearing in mind no French ship had as yet joined the Circumnavigation Club, it was logical to make a virtue of necessity and continue eastwards. In addition to the prestige resulting from making a circumnavigation, there would be certain practical benefits:
3. Though bolstering French self-esteem, recently badly dented as a result of events in North America, was undeniably a factor; there was also a strong desire to be part of the, principally European, drive to increase knowledge in the sciences of:

- a) **Navigation** - charts at this period were woefully inadequate, often more hazardous to mariners than they were a benefit. Charts currently in use frequently indicated features far from their true position, features whose existence was purely conjectural, and, even worse, did not show many hazards to navigation that did actually exist.

By the time of Bougainville's expedition voyages to remote locations were being regularly undertaken. Although, for many years, it had been possible to determine a ship's latitude with considerable precision, there was a pressing need to improve methods for determining longitude. In the absence of accurate and reliable chronometers the "best guess" at longitude was based on estimating distance run and making a stab at what had been the effects of wind and currents. It was not unusual for errors of more than 100 nautical miles to occur.

Astronomy was out of its infancy; vastly improved navigational instruments were now available and would facilitate determining the true shape and position of features on the earth's surface. Observation and documentation of: ocean currents, winds, weather and variation in the Earth's magnetic field were needed to reduce the incidence of disasters at sea.

- b) **Botany** - was by now an important discipline in European universities. The potential for significant benefits to agriculture and medicine were well recognized and understood.
- c) **Medicine** – it was increasingly necessary to understand the adverse effects on ship's crews caused by long periods at sea on a diet comprising largely of salted meat and hard-tack (Biscuit).

James Cook's ground breaking and wonderfully successful methods for maintaining the health of his crews, based on an understanding of human dietary requirements to ward off the scourge of scurvy, was internationally applauded and imitated. In recognition, Bougainville had embarked compounds derived from citrus fruits and an early fresh-water still.

- d) **Ethnology** – although all countries undertaking voyages of discovery considered it their right to claim inhabited territory in the name of their respective sovereigns; this

expedition, in particular, sought to gain a real understanding of the various peoples they encountered. There were even attempts made to do something to better their lot. Gifts of livestock, tools, implements and seeds of new food plant species were intentionally included in the ship's manifest for that specific purpose. Perhaps this was an early expression of the spirit of equality and fraternity that was soon to profoundly and totally transform French society.

Unfortunately, this spreading of European technology had a darker, if unintentional, side-effect; European diseases ravaged the populations in many parts of the world where time acquired immunity did not exist. The introduction of alcohol and modern weapons was, also, a very mixed blessing.

It is interesting to observe that, so powerful was this urge to pursue scientific progress what were in effect rival institutions, particularly those of France and England, seemed largely detached from the political realities of their respective countries. Scientists continued to exchange information, even to visit make visits to countries with which hostilities had been formally declared. Sir Gavin De Beer went so far to entitle one of his books "The Sciences were Never at War".

Accounts of voyages of exploration, scientific and philosophical papers were eagerly awaited and had been translated, almost before the ink was dry in their native language.

4. France was anxious to acquire its slice of a world that was, as yet, unappropriated by Europeans; that is to say the territories that were now being discovered with ever increasing rapidity. This imperative was felt particularly strongly in relation to the Southern Pacific Ocean. Bougainville was given specific and detailed instructions on how he should claim newly discovered territory in the name of the French king.
5. On a purely personal level Bougainville had numerous motives for wanting to be involved. He was by nature a true romantic, his enthusiasm for adventure, discovery and the sea-going life had been fired and stoked during the several long crossings of the Atlantic he had undertaken with a very experienced naval officer, Pierre Duclos-Guyot; who, at that time was captain of the ship in which Louis was a passenger. Duclos-Guyot was his mentor in all things maritime and was later to become his second in command and lifelong friend. Bougainville was genuinely concerned for the difficult situation many of the Arcadians found themselves in. They having been recently uprooted, following the loss of France's territory in Canada, he saw, in the Falkland Islands, a place where they might to make a new beginning.
6. The Falklands (*les Isles Malouines* to the French), the French claimed, had been first sighted by a ship's captain, a native of St. Malo.

These bleak islands stood at the gateway to the Pacific Ocean. Whoever controlled these inhospitable scraps of land also controlled, what was in days of sail, the most practicable route, via Cape Horn, into the Great Southern Ocean. Geographically the islands had the potential to become a base for operations with easy access to Spain's sprawling South and Central American empire. Territories so vast that Spain, for many and diverse reasons, was incapable at the time of realising the enormous development potential. It was real estate now under the covetous eyes of many nations; much of it would, one day in the not too distant future, be prized out of Seville's weakening grip.

Appendix 5

Jeanne Barret (sometimes written Baré or Barre)

I have opted for Barret, it being the name she used on her marriage certificate in 1774; but, before we go on to discuss this lady, the first woman to sail around the world, let us dispel the cock-and-bull story postulating that her femininity had remained concealed until recognised by the Tahitians. Be she ever so plain, shipboard she would have stood out like a rose in a garden of rank weeds.

It would have been impossible, on this cockleshell of a warship, for her presence to go long undetected. There are several reasons why I make this observation; for the sake of delicacy I will mention only the facilities available for relieving oneself. Depending on the function to be performed one either stood or hung one's backside over the ships bows (the heads) and committed one's votive offering into Neptune's realm! No screens, no privacy. Now, the crew of the *Etoile* numbered about 140 men, so, there would be, more often than not, someone to chat to during the procedure! Even before the coast of France had dipped below the horizon there could hardly have been a sailor onboard who was unaware of her gender.

Bougainville had privately recorded that a rumour had arisen during the early days of the voyage concerning the sex of Commerçon's valet; however, he did not investigate it. Louis' not very convincing tale, when the cat was unexpectedly let out of the bag in Tahiti, was for the record and the consumption of those of his lords and masters who were not already in the picture, or, preferred to appear not to be. As you will read, the king himself, when she finally did get back home, awarded her a small pension. Obviously he considered her pluck, not to say effrontery, reflected well on the honour of France, and so it did.

In 1764 Philibert Commerçon had qualified as a Doctor of Medicine. His all consuming passion was, however, botany; he was a very good naturalist, sufficiently well thought of by Carolus Linneus, the great Swedish botanist, to be commissioned to collect and classify all the fish of the Mediterranean for Stockholm University. As a specialist he was indispensable to the voyage's if its scientific objectives were to be realised. In my opinion it is likely that Bougainville, and perhaps others, turned a blind eye to mademoiselle Barret's presence in order to ensure the expedition's complement of scientists was of the first order. Louis was, after all, a Frenchman and a gallant one at that.

Jeanne was born on July 27th 1740 in the small village of *la Cornelle* in Burgundy. The registration of her baptism states her to be the natural daughter of Jean Barret, a labourer and Jeanne Pochard. Her father must have been illiterate, for only his mark appears on the document. Nothing is recorded of her childhood except that which Bougainville gleaned when he questioned her in Tahiti, the pretence of her masculinity then being no longer sustainable.

Interspersed amongst the yarns she spun, with the honourable intention of diverting any blame for the deception being laid at Commerçon's door. There was, no doubt, a certain amount of truth in some of what she told him. She gave details that there would be nothing to gain from fabricating. She said she had been made an orphan when quite young. That, in her youth, an inter-family dispute had led to a lawsuit that had been decided against her, casting her into penury.

There remains no certain information about how she was educated or gained access to the resources that had led to her self-improvement. Her signature on a number of legal documents proves that she was literate. Several of her biographers have proposed very plausible possibilities.

Glynis Ridley, (in her biography "The Discovery of Jeanne Barret) suggests that her mother may have been a Huguenot. The Huguenots were a sect of reformed Protestants who had gained a reputation for literacy extending even to its adherents who were simply manual labourers.

Another biographer, John Dunmore, suggests that she may have been taught by a parish priest or taken on as a charity case by a member of the gentry. That she was indispensable to Commerçon, to the degree that he was prepared to engage in such a deception, cannot be questioned. It confirms, beyond doubt, she was a talented and intelligent woman. One blessed, perhaps, with competencies confined not only to botany.

Irrespective of how she had passed her childhood and adolescence; by, or before, her early 20s she must have had regular access to literature on subjects related to botany because she had, by that time, supplemented her knowledge, in that subject, to a level way beyond that of casual interest.

It is worth remembering that the great majority country people, even within the time-frame of my own lifetime, were able to identify and name every wildflower and tree within the region in which they lived.

In 1760 Commerçon married; his wife, Antoinette Vivante Beau, was the daughter of a notary and sister to the local parish priest. At this same time he moved house from Châillon-sur-Chalaronne (where he practiced as a doctor of medicine and where he had indulged his love of plants by creating a modest botanical garden), to the village of Charolais, near Toulon-sur-Arroux, 22 kilometres, or so, south of la Cornelle.

In April 1762 Antoinette died in childbirth; the infant, a boy, survived and was named Anne François Archambault. It is not known for certain whether Philibert had met Jeanne by this time, but, it is extremely likely he had.

Commerçon was a somewhat haphazard administrator; he had a reputation for been lax and disorganised when it came to the business of properly documenting his otherwise brilliant field-work. It is very likely that he had become aware of Jeanne's reputation as an amateur, but, deeply knowledgeable, botanist and herbalist. Whatever, at some time in the early 1760s Jeanne was living in his home, perhaps initially as his assistant, then undoubtedly after Antoinette's demise as housekeeper and nanny to his newly-born son.

It is unlikely that they had become lovers prior to April 1762; Commerçon's affection for and attachment to Antoinette was well known. Antoinette's brother, who held Commerçon in high esteem, recorded in his correspondence how great had been Commerçon's pain when he lost his wife. Later Commerçon, named a tree in her memory, "*Pulcheria commersonia*", which he had discovered on l'Île de France, (Mauritius). Its name is based on Antoinette's maiden name; Beau meaning beautiful in French and the Latin, for beautiful, being Pulcher.

That they had become intimate some time before March 1764 is undeniable because in December of that year Jeanne gave birth to a son, Jean-Pierre Barret. It is highly unlikely that the father could have been anyone other than Commerçon.

In 18th century France it was a legal obligation on unmarried pregnant women that they register the forthcoming event. They were thus able, if they so wished, to record the father's identity. The document Jeanne completed still exists and it shows she chose not to identify the father. The social status of the witnesses to this document indicates someone well connected was in the background ensuring things went smoothly. That someone was almost certainly Commerçon.

In August 1764 Commerçon once again moved house; this time to Paris. Jeanne, her pregnancy now being far advanced, accompanied him. He had been invited there to join up with the astronomer Jérôme de Lalande. Philibert and Jérôme had been friends since childhood; they had both been born in Bresse, (Rhône-Alpes, Bourgogne). During their entire adult life they corresponded frequently. Their new residence, for they were now openly a unit, was in the Rue des Boulangers, conveniently situated close to the King's Garden (now the Botanical Gardens).

It was at about this time that Jeanne changed her name to Jeanne de Bonnefoy. Why and when exactly this change occurred is uncertain, but, is likely to have been some time after the birth of her child in December 1764. The new addition to the family, a boy, was named Jean-Pierre Barret.

The couple, for some unknown reason had to, or, at least were willing to, put aside bonds of kinship. Jean-Pierre was given into the care of the Paris Foundlings Hospital; he died a fostered orphan before attaining his first birthday.

Anne François, Commerçon's son, by his wife Antoinette, had himself been relinquished some time in 1765. He had been fostered by the family of Antoinette's brother, his maternal uncle, l'abbé François Beau. He never saw his father again. This apparent lack of paternal affection was, in all probability, the result of Commerçon being literally summoned to join Bougainville's expedition. For when it came, the proposition, bearing the approval of the king, must have seemed more of an unrefusable appointment than an invitation. Commerçon would certainly have been flattered and considered it an honour, and an opportunity, not to be missed.

During his time in Paris Commerçon was a familiar and respected figure in the academic circles he frequented. It was through his scientific associations that he came to be offered the position of expedition botanist. It had been as a result of Jérôme de Lalande's recommendation that Philibert had been brought to the notice of Pierre-Isaac Poissonnier (he who invented the seawater distillation equipment used with such success during the voyage). In 1764 Poissonnier held the post of Inspector general of Naval Medicine and Surgery. On Poissonnier's recommendation Philibert came to be nominated, virtually by royal appointment, "The King's Doctor of Botany". With such backers why would Bougainville make waves over a bagatelle such as Philibert's servant being a cross-dresser? Commerçon, at this time, was far from being a well man. He relied on Jeanne not only because she was a competent physically resilient botanist possessed of good practical organisational ability; but, also, and increasingly, as his nurse.

The stage is now set for the exit of Jeanne and the entrance of Jean!

Sometime shortly before two ships sailed from Brest on 15 November 1766 Jeanne, dressed as a simple matelot, joined Commerçon aboard l'Etoile. His/her grade was officially that of Commerçon's servant. The botanist, ostensibly because of his status as a senior scientist, was entitled to this perk which was paid for directly out of the royal purse. I cannot help feeling there were people, other than just our heroine and Commerçon, complicit in this subterfuge. The fact that instead of messing in the fo'c'sle, with the rest of the crew, she slept in Philibert's personal cabin; this constituted a departure, so far removed from the norms of rigorously class-conscious 18 century shipboard etiquette, as to be bizarre, if not unprecedented.

Reference to her virtuous, stoic and highly professional conduct under what were often physically taxing and dangerous conditions has already been described in Bougainville's journal.

Giving added credit to her strength and courage is a reference made to it by one François Vivès (Vivez). Vivès, in spite of disliking Commerçon intensely, wrote in his own diary:

"The unstinting care she took of her master always seemed to be unnatural for a man-servant. Only a month or so after they had been comfortably ensconced, the rumour circulated amongst the crew that she was a woman. One only had to look at her to see that everything about her suggested her femininity: her small frame, a large backside, a pronounced bosom, a tiny round head, her rosy cheeks, a voice that was pitched higher than any man's and with a certain sweetness about it.

Above all the way she moved, always lightly with pronounced dexterity and nimbleness. Even so M Bougainville took no action! She and Commerçon had the temerity to put it about that her lack of masculinity was because she was in fact a eunuch.

Credit where it is due, however, she carried out her work with such tenacity and courage that the crew, justifiably, nick-named her "The Beast of Burden".

In April 1768 the cover-up could no longer be sustained when the truth, concerning her sex, was publicly outed by a Tahitian with sharp eyes; or, just normally sensitive nostrils. When the standard of hygiene tolerated, by necessity, aboard such a ship is considered, the possibility that her femininity was given away because she smelt, is not so very remote. The islanders, remember, were described as being so unfamiliar with Europeans that they found it necessary to touch and closely examine the bodies of the crew, simply to confirm they were made of the same stuff as themselves.

When l'Etoile sailed from l'Ile de France at the end of December 1768 Jeanne and Commerçon were left behind. The plausible and, probably largely true, reason given was they were to make a detailed study of the flora in the region. It would, after all, be an irresistible opportunity for them to indulge their obsession. l'Ile de France, nearby Madagascar and Reunion were all locations that had not, as yet, professionally studied.

Additionally, the civil intendant, Pierre Poivre, himself a keen amateur botanist, got on well with Commerçon. Commerçon was by this time quite frail and in poor health and it was considered the island's mild climate would benefit his weakened constitution.

Most conveniently, a stop-over in the Indian Ocean would also avoid the embarrassment of Jeanne disembarking in France and adding a touch of scandal to the intense interest the adventurer's return would unquestionably occasion. It is to be noted that no attempt, or even suggestion, was made that either of them should be charged with, what was after all, a quite serious breach of naval regulations. Jeanne was now free to re-assume her normal feminine role and she and Commerçon collected and classified plants on the island, at Reunion and in Madagascar, but, Commerçon was never to leave l'Ile de France; he died there in March 1773.

Not a great deal remains on record of their co-operation during these five years. All that is known about this period is the result of Jeanne's meticulous cataloguing the botanical material they had gathered.

However, in May 1774 Paul-Philippe Sanguin de Jossigny, who held the post of senior engineer at l'Ile de France and who had spent a considerable part of his time assisting in botanical field work and in making plant illustrations, returned to France bringing with him 34 crates of classified and labelled botanical specimens.

With Philibert's death Jeanne, at the age of 32 years, found herself alone, far from France and with no means of support. The resourcefulness and courage, that had always sustained her during the voyage, once more came to her aid. She somehow scraped together the resources to open a bar in the island's capital, Port Louis. This enterprise, however, was soon to incur the displeasure of the authorities. Some of her clientele were found to be intoxicated on the Sabbath. Her time as a hostess could not have been of long duration because by May 1774 she had met and married a Marine by the name of Jean Dubernet. He was one of the several soldiers garrisoned at l'Ile de France in support of the local government. It is not known whether this was a meeting of minds or a union of convenience. She was, however, without doubt, the sort of girl whose character would earn the respect of many men. Whatever he meant to her emotionally he was, as her legal husband, her means of returning to France on his demobilisation.

In the year 1776 the couple returned to France and spent part of their time at Saint Aulaye, in the Périgord region, Jean's home village, and Jeanne's own birthplace in the Bourgogne.

By November 1785 her financial situation was considerably improved: she had by now received a legacy from Commerçon's will.

But, even more pleasing to her was the recognition of the unique part she had played in Bougainville's expedition. The king of France, personally, rewarded her accomplishment and determination. In recognition of the fact that she was the first woman to sail around the world he awarded her a life pension of 200 livres per annum. It was an honour of which she was modestly, but, inordinately proud.

Jeanne died in on the 5th August 1807 at Le Graves, La Moutine aged 67 years. She is buried close to the church at Saint Aulaye.

Appendix 6

Philibert Commerçon.

Because of the relationship that existed between Philibert and Jeanne Barret, a good deal of information has already been related concerning him in Appendix 5. The notes that follow are intended to fill in the gaps relating particularly to the man himself.

Commerçon was born on the 18th November 1727 at Chatillon les Dombes (now Chatillon-sur-Chalaronne, Rhône-Alpes). He was one of 13 children, of whom only 7 survived into adulthood.

His father was a lawyer and something of a martinet; he insisted his son follow a daily regimen of rigorous physical exercises. Even under the most inclement weather conditions the child was forced to remain almost naked while he exercised; to “toughen him up”.

Commerçon, however, seemed not to hold this against his father; he phlegmatically remarked, later in life, in a letter to Beau, his brother-in-law, that it was probably this early exposure to hardship that enabled him to cope with the rigours and deprivations he faced aboard ship and in the many hostile and dangerous locations he visited.

Commerçon began his classical education at Bourg-en-Bresse College where he had as Master RP Garnier. Philibert was to later say that it was Garnier who inoculated him with the virus of “botanimania”. On completion of the course in rhetoric at Bresse; he went to the Benedictine seminary at Cluny where he studied Philosophy. At Cluny he had as tutor M. Vachier; he also was deeply interested in botany and took up Philibert’s botanical tuition where Garnier had left off. The two men remained lifelong friends.

His father was adamant his son study law. Commerçon, however, had not the slightest inclination to follow in his footsteps. As a consequence, almost a year was wasted before the ensuing battle of wills was resolved. Finally George-Marie, grudgingly, consented to Philibert’s wish that he study medicine.

Philibert began his medical studies in 1748 at the prestigious University of Montpellier; he was almost 21 years old. The years he spent at Montpellier his diligent application to the curriculum was interspersed with frequent episodes of riotous behaviour. He was known by his friends (two of whom, Crassous and Gérard were also to become not only good doctors good botanists as well) as a womaniser, a heavy drinker and one prone to pick a fight with little provocation. They were, perhaps, not very much more rebellious than were other students in that era. He was simply a young man fizzing with testosterone and determined to sow his wild oats.

Lalande described his character in the following manner:

“He was extreme in everything: at play, in love, in his hatreds, in his friendships, in his work, and especially, in the way he over-indulged his every appetite”

Botany was, at this period was an important component in a doctor's training; consequently, the faculty of medicine at Montpellier had its own renowned botanical garden. It had been constructed in 1590 at the command of King Henry IV. Philibert, already an obsessive collector, was caught in the grounds stealing specimens of the best and rarest species growing there. After ignoring warnings to desist, the head gardener reported his larceny to M. Boissier who held the chair of botany.

Boissier was considered a cold fish and no more than mediocre as a botanist. He had, however one single monumental, if hilarious claim to fame. His thesis had been graced with the singularly ludicrous title, "Is it Possible to Cure Love by Means of Plants?"

Commerçon had little time or respect for Boissier he tactlessly and riskily, considering his junior status, took malicious delight in correcting the errors Boissier was prone to commit. He went so far as to tactlessly underline mistakes in Boissier's written work. Boissier retaliated by banning Philibert from entering the botanical garden. Though no longer allowed through the gate, Commerçon was not defeated and continued his raids by climbing the walls. Following this restriction that had been placed upon him, the vengeance Commerçon extracted was bitter indeed. On the day prior to one of Boissier's scheduled presentations Philibert obtained access to the plant samples that were to be used. He exchanged many of the labels and created some new ones bearing ridiculously non-existent plant names. The professor's presentation became utterly confused and he committed the most appalling blunders in attempting to continue the lesson. Eventually, to the delight of the students, he was compelled to flee the classroom in utter confusion.

It may be conjectured that the principle reason why Commerçon had so resolute a desire to study botany, as a science in its own right rather than merely as a component of the medical curriculum, was the imprecision of medical science at that time. There had been no advances comparable to the great changes currently taking place in other disciplines. The Industrial Revolution was under-way; agriculture, chemistry, astronomy and a host of other disciplines, recently no more than medieval arts, were fast moving onto a sound scientific footing.

Medicine was lagging behind, perhaps this was because it had less obvious potential for creating wealth. Tuition was pedantic, courses hardly different from those of a hundred years before; many procedure and treatments were based, as they had ever been, on unquestioned traditionalism.

Commerçon, however, was a young man ignited by the growing enlightenment he saw around him. He was avid for precision and gifted with a truly rational scientific spirit of enquiry. All of this was, of course, totally out of kilter with the thinking of those who strove to be his instructors.

Despite his wilfulness and his sometimes deplorable behaviour, as Lalande would testify in his eulogy, he showed steadfast application as a student.

Following his graduation in 1775 he engaged himself in botanical field work and he collected avidly in Switzerland, the Auvergne, the Pyrenees and the Alps.

During one of his botanising field trips in the Charollais, he was resident for some time, in the home of a distant relative, at Toulon-sur-Arroux. Here he met and fell hopelessly in love with Antoinette-Vivante Beau; she was the sister of the parish priest. She not only reciprocated his feelings, but, perhaps just as importantly, she admired without reservation his other great love. Moreover, she was willing to put up with all the inconveniences that his all-consuming passion demanded.

Practicing doctor to earn a crust he might be; but, at heart, he was a naturalist to the core. Nevertheless, although medicine always played second fiddle to botany, he was considered to be an extremely competent and successful doctor. When he left his practice to take up his role in Bougainville's expedition, he was greatly missed by his former clientele.

Amongst his many other talents, Philibert was considered to be an exceptionally fine chess player.

There can have been few life histories that were, on the one hand, as tortured and full of anguish as was his; and yet, on the other, so abundantly productive. He must have had some precognition of how his life would pan out for he said, concerning Antoinette, in a letter to his close friend Crasseus on the occasion of sending him a slim volume entitled "The Martyrdom of the Botanist"; it being the first fruits from his immature pen:

"I have found in this place a soul mate already well acquainted with the science and love of plants and who I soon intend to introduce into the nuptial bed".

Right up to the 20th century, and to some extent even now, tropical botany could not be considered a good career choice for the peaceful family man. The personal attributes needed to survive are: a robust constitution, a will of iron and the ability to tolerate great discomfort for extended periods. A picture that does not readily conjure up the image of the frail Philibert Commerçon.

What obstacles and hazards then must have been then, in the 18 century, when there was but scanty information about remote geographical locations? This was an era when charts and maps were invariably inaccurate, communications haphazard and food and clothing totally unsuitable for harsh conditions?

Commerçon, during the majority of his life, worked an 18 hour day almost every day of the year. Such a work obsessed existence alone would explain his death from total exhaustion at the age of only 46. He did not suffer fools gladly and was temperamental incapable of tolerating the carping and mocking envy of contemporary, frequently mediocre, academics. Anything associated with botany had to be done to his meticulous standards. Instances of when it did not, would provoke him into trials of great mental anguish.

That Commerçon remains relatively unrecognised today, when compared to contemporary scientists of equivalent merit such as: Jussieu, Lacépède and Buffon is entirely due to his failure to systematically catalogue and publish his discoveries. Cuvier, who respected him greatly, said of him;

“Commerçon was a man of inexhaustible energy with profound knowledge of his chosen field. If he himself had published his observations he would rank very highly amongst the greatest naturalists. Unfortunately, he is dead before he was able to publish the greater part of his incredible discoveries. His manuscripts and field note-books were confided to people who have, unforgivably, neglected them”.

To this should be added the fact that a considerable number of his observations were plagiarised by his rivals.

Comments made by several of his contemporaries, concerning his personality, suggest that he was considered to be: ill tempered, pernickety, weak-willed, boastful and disorganised. He was, without a doubt, not an easy man to get on with.

However, many of the criticisms made against him, in an age when backbiting was something of a national pastime, may be taken with a good-sized pinch of salt. He was to those he chose to be his confidants, an amusing and loyal friend.

The observations made on his lack of organisational ability, particularly where they relate to the cataloguing of his botanical material, are, however, substantiated by ample evidence. It should, however, be remembered that he was not a professional botanist, had no formal training or any recognised botanical qualification; he was, nonetheless, unquestionably, a genius in that particular field.

In such esteem was he held that no lesser authority than the great Swedish naturalist, Carl von Linnaeus, recommended him to the queen of Sweden to undertake a study into Mediterranean fishes. Further, his work during the voyage under Bougainville received recognition in 1771 when he was admitted into the Maritime Academy, and, again in 1773, as an associate member of the Academy of Sciences. This happy event would have given Commerçon enormous pleasure had he not been in his grave some months before the news of it reached l'île de France.

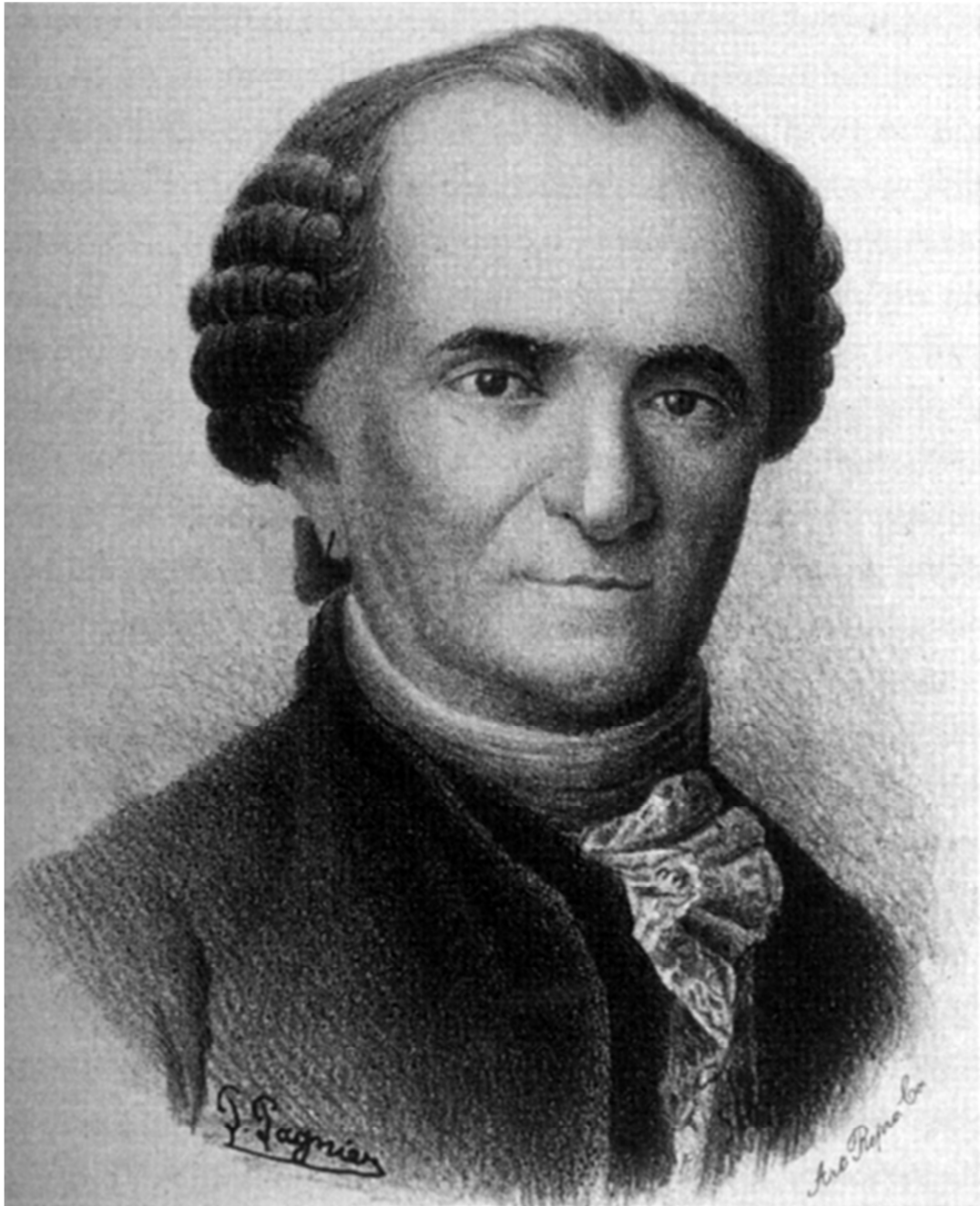
Happily, today his standing as a truly great botanist has been universally and permanently confirmed. This is principally because:

- i) A considerable volume of the botanical material he collected still exists.
- ii) Modern scientists, while reviewing his achievements, have collated those documents he did bring himself to put together.

His name lives on in the tropical climbing plant bougainvillea, (he named it in honour of the expedition's leader); the small Commerçon's, or, Patagonian dolphin, a crater on Reunion Island, in statue and road names both in Mauritius and Tahiti.

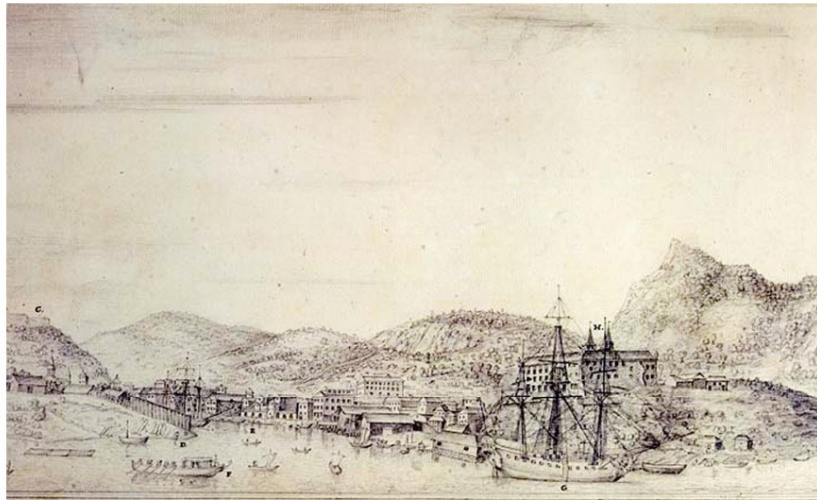
My sincere thanks to Doctor A Role, *de l'académie de la Réunion*, from whose work “*La Vie Adventureuse d'un Savant*” I am indebted for some of the information given above. Doctor Role's most illuminating work on the life of Philibert Commerçon is available in PDF format (in French) at:

<http://www.biusante.parisdescartes.fr/sfhm/hsm/HSMx1974x008x001/HSMx1974x008x001x0151.pdf>



Philibert Commerçon

Appendix 7.1



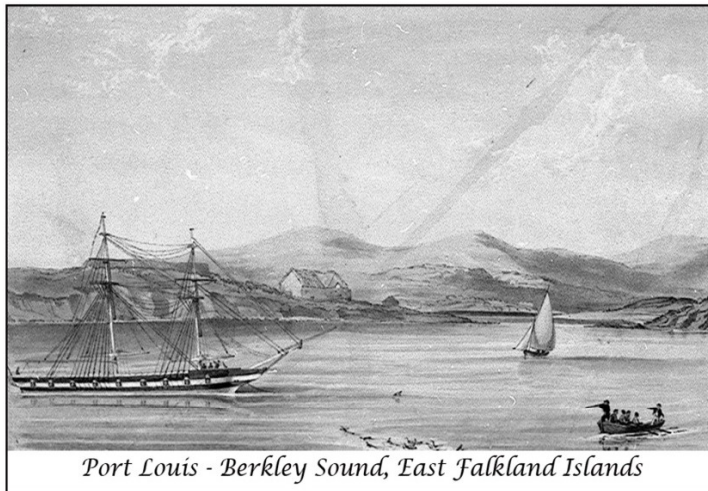
*A VIEW of the Town of **RIO JANEIRO** from the Anchoring-Place.*

*Drawing made by Alexander Buchan in 1768
during to course of James Cook's 1st Voyage*

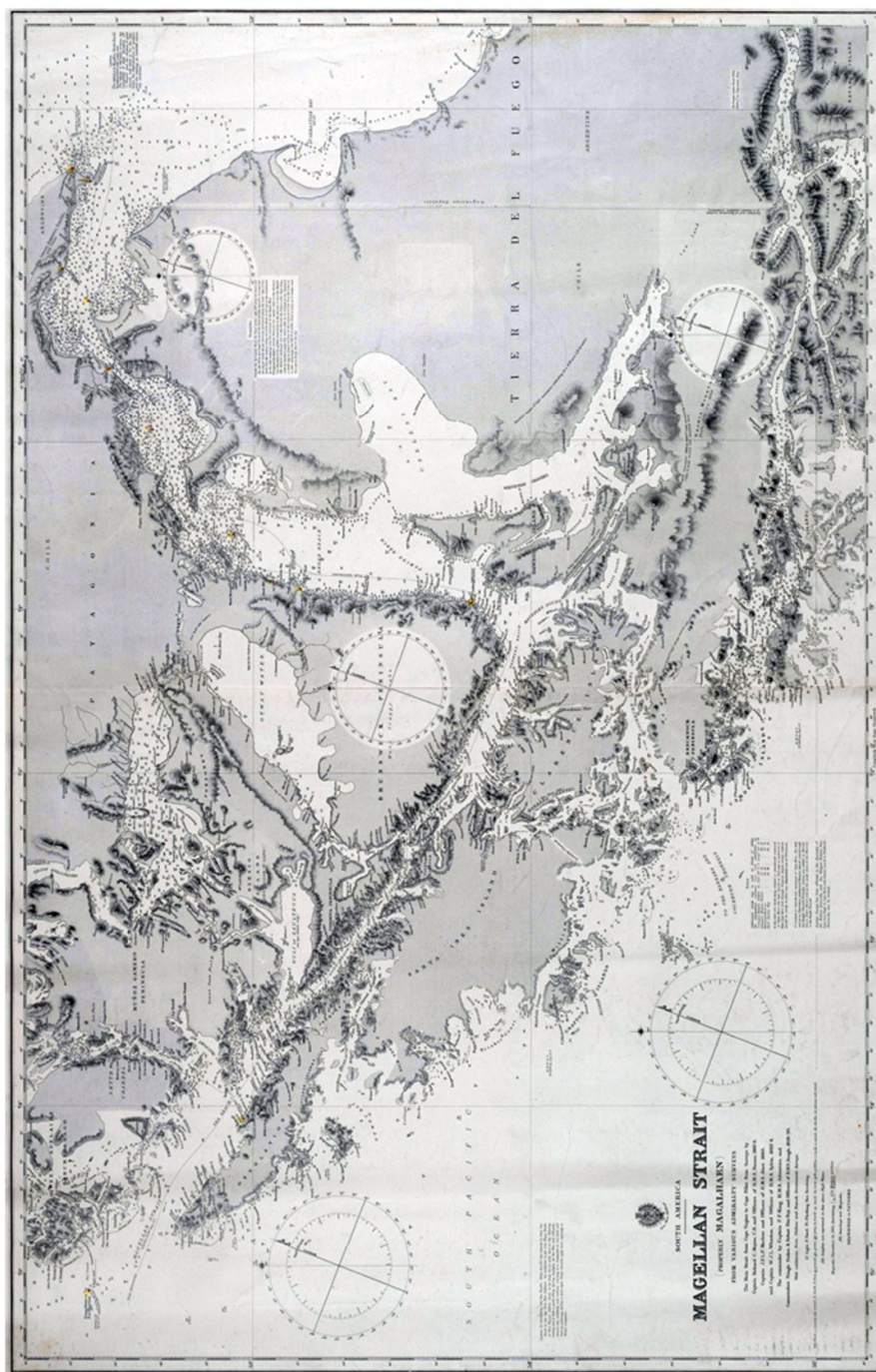


*Montevideo Harbour in 1873 by Johann Berend Petermann
drawn during the 2nd Visit of H.M.S Beagle*

Appendix 7.2



Appendix 7.3



Compare this chart, made in 1909, with the one Bougainville used

Appendix 7.4

Images illustrating the dramatic, frequently intimidating,
terrain in the Magellan Strait

i



Contemporary Engraving of Port Famine

National Library of Australia



Tierra del Fuego, HMS Beagle with Mount Sarmiento

National Maritime Museum, Greenwich

Appendix 7.5



Pategonians in the Magellan Strait

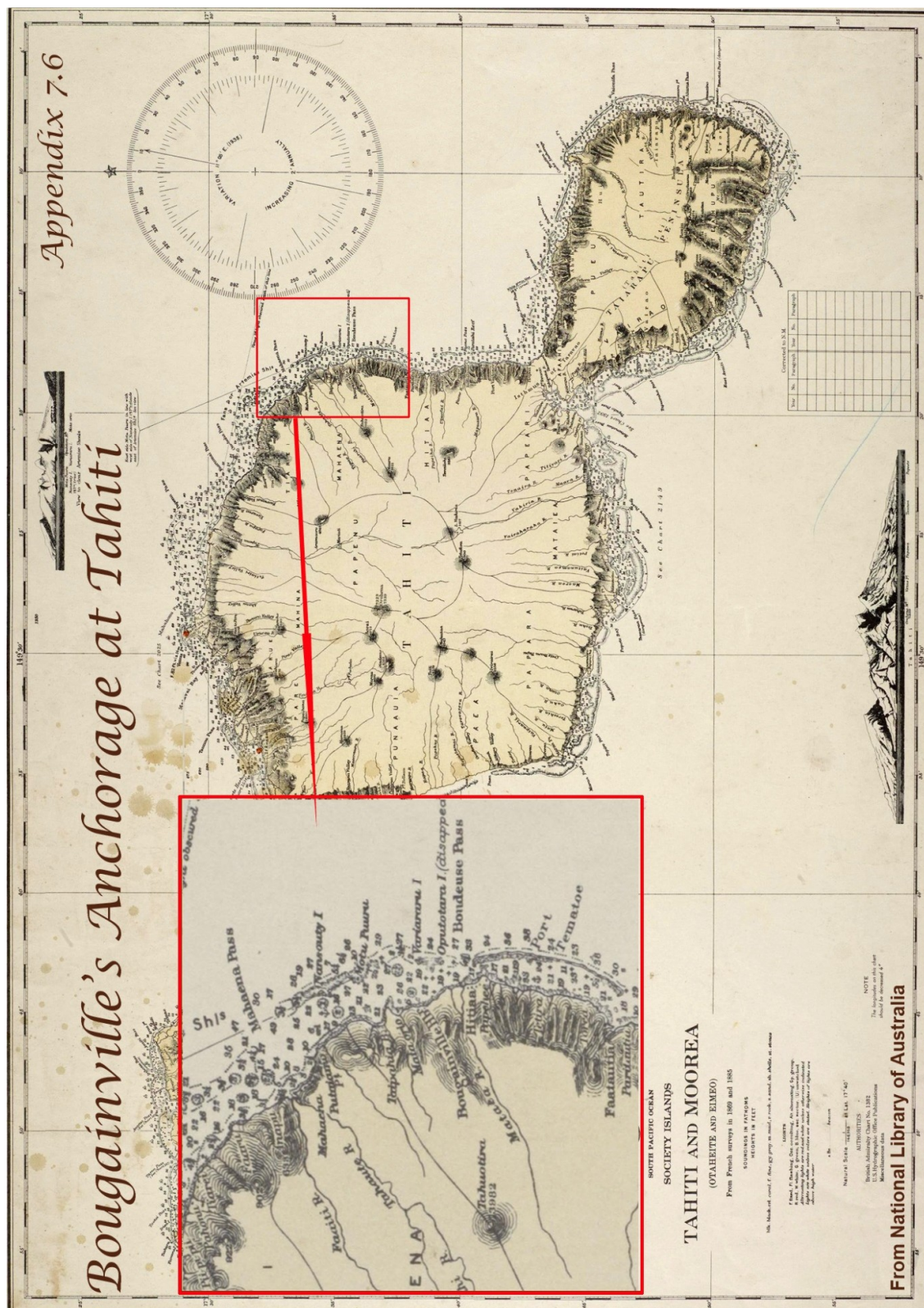
*Drawing made during the Voyage to the Antarctic in 1842
by the French Ship Astrolabe Commanded by Dumont d'Urville*



*Fugian, Probably of the Yaghan Tribe (Bougainville referred
to them as "Pecherats")*

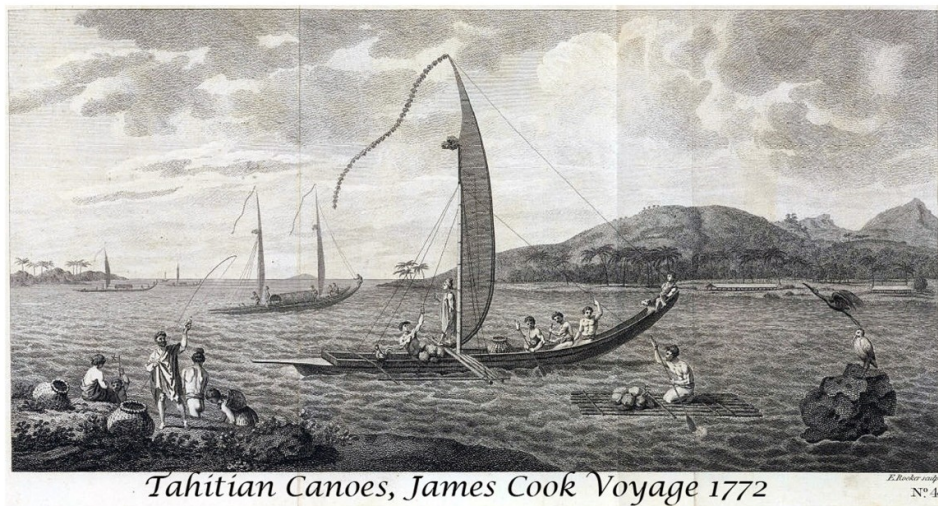
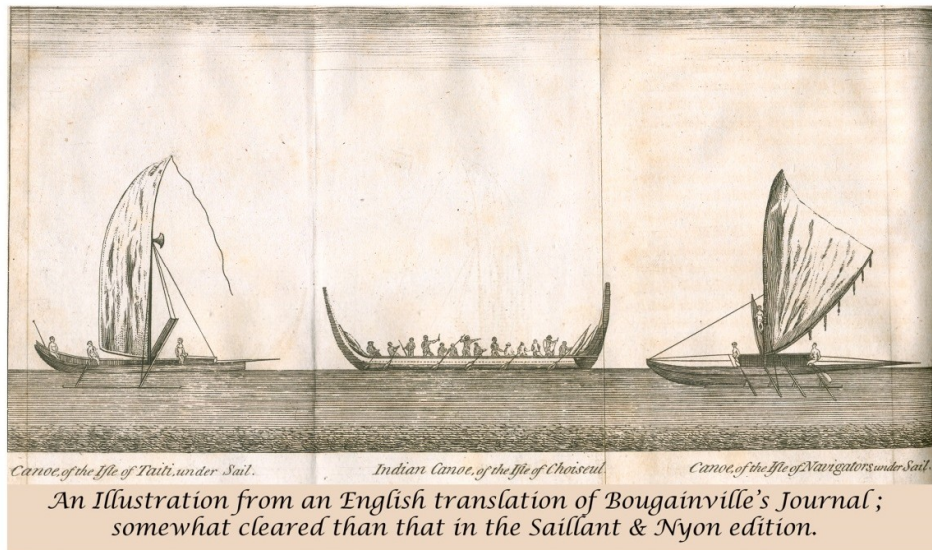
Painting by the ship's artist HMS Beagle - 1890s

Bougainville's Anchorage at Tahiti



Appendix 7.7

Tahitian Canoes



Appendix 7.8



Princess Poedua

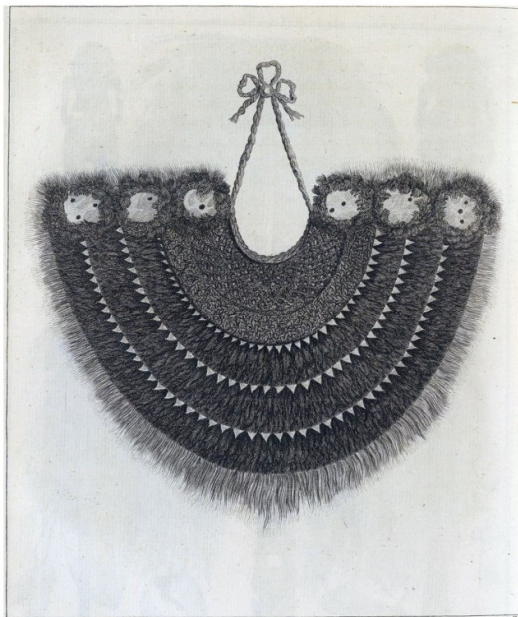
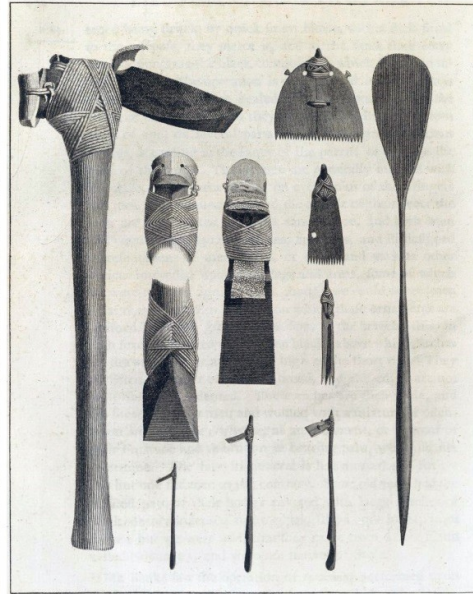
A painting by the English artist John Webber who accompanied Cook during his 3rd. voyage into the Pacific Ocean.



Samual Wallace with Tahitians - Voyage of HMS Dolphin 1767

*J. Hall sculp.
Nº 22.*

Appendix 7.9



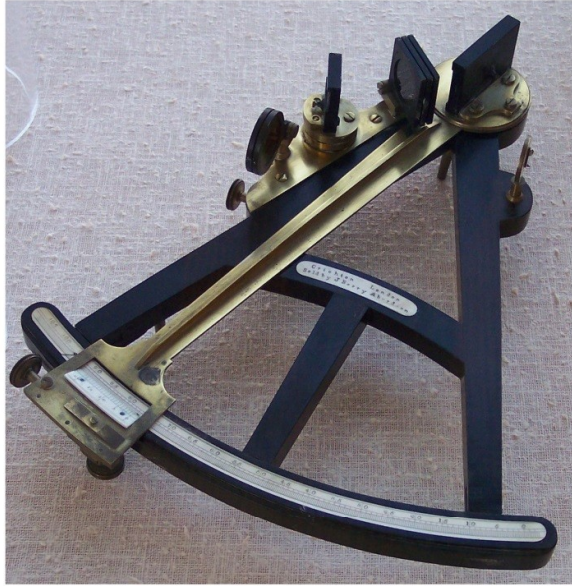
Tools & Items of Apparel of the Tahitian Islanders

From Drawings made during the 2nd. Voyage of Captain James Cook in 1772

Appendix 7.10

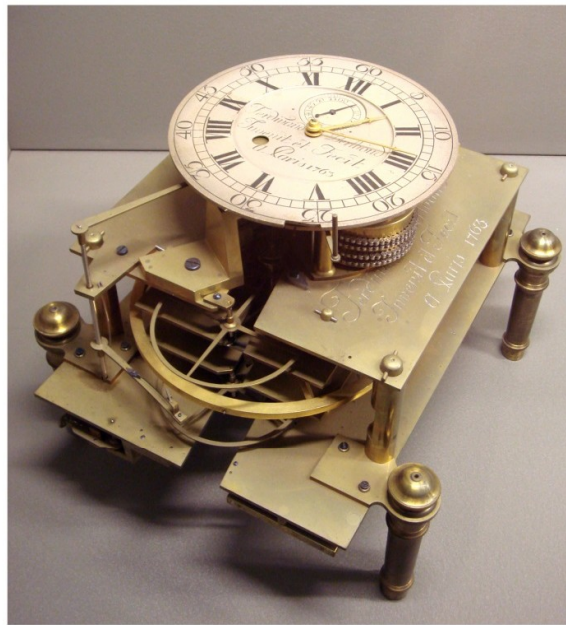
Part of a chart published only 37 years after the return of the Boudeuse to France. It illustrates to great strides made in cartography that voyages of discovery, by navigators such as Cook & Bougainville and advances in methods for determining the position of ships at sea, made possible. The approximate route, taken by the Boudeuse, is shown.





Appendix 7.11

Hadley's Octant



THE BERTHOUD MARINE CLOCK No.2

Bougainville, for an accomplished mathematician, astronomer & navigator, is strangely silent about the manufacturer of his instruments for recording time. He would, without doubt, have had some sort of sophisticated watches or marine clocks. The Marine Clock No.2, developed by the Swiss chronometer maker Ferdinand Berthoud, who had established a manufactory in Paris in 1745, had been available since about 1763. More to the point, Berthoud had been appointed clockmaker to the French Navy since 1762.

Appendix 7.12

